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Co-ordination of gifted and talented education in primary schools in New South Wales

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Co-ordination of Gifted and Talented Education in Primary Schools in New South Wales

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I hereby declare that this submission is my own work and that, to the best of my knowledge and belief, it contains no material previously published or written by another person, nor material which has been accepted for the award of any other degree or diploma, except where due acknowledgment has been made in the text.

Abstract

In view of the Policy and Implementation Statement issued by the NSW Department of School Education in November 1991, on the education of gifted and talented children, a postal survey was undertaken to ascertain how this had been introduced into primary schools. The Metropolitan South West Region's 135 primary schools of New South Wales Department of School Education were the target sample group. The following areas were examined: the educational background of the co-ordinator, the role of the co-ordinator and the progress of the policy implementation in the school. It was found that very few gifted and talented co-ordinators had participated in formal training in gifted and talented education and their role has not yet been clearly defined. A variety of strategies have been implemented to cater for the diverse needs of the gifted and talented children in these schools; however, many co-ordinators seek further training in this area. The study concludes with a number of recommendations to facilitate future implementation strategies.

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'The Region (Metropolitan South West) is committed to ensuring that all children have equal opportunity to achieve their personal best in a caring environment.'

(NSW Dept of School Education 1991c, p.5)

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Chapter One

General Introduction

1.1 Purpose

With the launching of the Implementation Strategy for the Education of the Gifted and Talented (see Appendix 1) in November 1991 by the Minister for Education, Mrs Virginia Chadwick, there was a turning point in the education of gifted and talented children within schools. The impetus for this document came from the New South Wales Government Strategy for the Education of Gifted and Talented Students (April 1991) (see Appendix 7).

The Implementation Strategy suggests that all teachers should be in-serviced in gifted and talented education by the end of 1993. It is also recommended that by 1995 a teacher in each school, following suitable training, be designated as Gifted and Talented Co-ordinator to be responsible for gifted and talented education.

In order to implement the policy, it is vital that data are ascertained to indicate the stage each school has reached in catering for gifted and talented students. Through the use of a postal survey, this study proposed to determine the extent of the acceptance of this recommendation and the role of the gifted and talented co-ordinator in Metropolitan South West Region Primary Schools.

The survey addressed the issues of the role of the gifted and talented co-ordinator within one region of the New South Wales Department of School Education. An analysis of the nature and extent of special provisions available for the education of gifted and talented children in the Metropolitan South West Region and an examination of the

background, professional role and perceived needs of the school co-ordinator of gifted and talented children, would enable a framework of needs and services to be developed.

It was a major purpose of this research to ascertain both the educational background of these co-ordinators in the field of gifted and talented education and their role in implementing the Department of School Education's Policy on the Education of Gifted and Talented Students. In addition, it was intended to analyse the level of knowledge co-ordinators have and/or consider relevant to them in their role.

These objectives follow from the Department of School Education's Implementation Strategy (see Appendix 1) which was launched in November 1991. This strategy requires schools to take account of their gifted and talented populations through their teaching practices and also to select a member of staff to assume the responsibilities as the co-ordinator of teaching gifted and talented children. Information gained from the survey will enable universities and schools to plan and implement courses to ensure that teachers are competent to carry out the requirements of the Implementation Strategy.

1.2 Sampling Considerations

New South Wales is divided into ten administrative regions by the Department of School Education (see Appendix 2). For the purpose of this research, one metropolitan region was selected which included both urban and rural sections of the State (see Appendix 3). The Metropolitan South West Region of Sydney has a cross section of schools ranging from small schools with under 160 children to large schools with more than 700 children; additionally, there are some schools which only cater for the infant classes. The region consists of 135 schools (see Appendix 4).

1.3 Research Questions

In examining the role of the gifted and talented co-ordinator in the primary school in the Metropolitan South West Region, the following questions were addressed.

1. What is the demographic size and geographical location of the school?
2. What is the academic background and experience of the Co-ordinator of Gifted and Talented Education?
3. What policy developments have been made at a school level?
4. What forms of identification have been instituted in the school?
5. What forms of enrichment have been utilised both inside and outside school hours?
6. What forms of acceleration have been adopted in the school?
7. What are the expected roles of the Co-ordinator of Gifted and Talented Education in the primary school?
8. What future knowledge is required by the Co-ordinator of Gifted and Talented Education?

It was hypothesised that the level of inservice and training that teachers have undertaken has not prepared them for their role as Co-ordinator of Gifted and Talented Education in primary schools.

1.4 Definitions

For the purpose of this research, the following terms will be used throughout as indicated:

The Region — The geographical region of the Department of School Education's Metropolitan South West Region

Educational Resource Centre — A regional office which administers various functions for the schools and where cluster directors are stationed. The centres are 'designed to provide convenient access to strong professional support for principals and teachers' (Scott, 1990, p.82). Two services are provided

at these centres - material resources and human resources (see Appendix 5).

Cluster — A group of schools which is supervised by a cluster director. A cluster comprises of 14-15 schools, including both primary and secondary schools and in some cases special schools (see Appendix 6).

Cluster Director — A person responsible for the management and educational leadership of a group of schools, providing assistance in planning and implementing curriculum needs, developing staff development programs and ensuring that the resources available at the Educational Resource Centres are utilised for the maximum support of the schools.

The Metropolitan South West Region has the following Educational Resource Centres and Clusters:

Region
Metropolitan South West Region

Educational Resource Centres				
Bankstown	Cartwright	Chester Hill	Glenfield	Macarthur

Clusters				
Bankstown	Bossley Park	Canley Park	Glenfield	Campbelltown
Birrong	Busby	Fairfield	Leumeah	Narellan
East Hills	Liverpool		Macquarie Fields	Picton
	Miller		Raby	Rosemeadow

Table 1: Metropolitan South West Regional Organisation

1.5 Assumptions

Public interest, fuelled by media reports, discussions and political action in any topic stimulates many ideas and concerns. The relative importance of an area seems to increase in the public arena, and with that increase comes the need to determine that those who express opinions have the requisite knowledge and experience for their views to be taken seriously.

The position of responsibility that some classroom teachers are accepting at the moment is the role of co-ordinator of the gifted and talented students within their school. For many, the position means an important duty and to complete the role successfully they realise that many hours of work and training are required. However, for others it is only an additional professional duty because no one else will accept the role. It is due to the various concepts of this role that a survey instrument was used to assist in interpreting the background, knowledge and interest of those teachers who have undertaken this position.

1.6 Limitations of the study

This study focused only on one of the ten Department of School Education Regions of New South Wales. It therefore gives an indication of the developments in this Region, but these cannot be extrapolated for the whole State. The information gained, however, will highlight areas of concern that other regions may choose to consider when planning and implementing programs for gifted and talented children.

As schools are still in the process of developing their policies and implementing the strategies of teaching gifted and talented children, the survey represents only an analysis of the beginning of the process.

The time of relevance of this study is limited as many teachers may change their position at the end of the academic year. However, it must be assumed that similar backgrounds would be apparent in any other incumbents appointed under the current conditions.

Chapter Two

Review of Literature

2.1 History of Giftedness

Giftedness is not a phenomenon of the nineties. The origins of research into giftedness are generally attributed to Terman, however earlier work by Sir Francis Galton (1822-1911) and Alfred Binet were the foundations of his research. Galton's research focussed on the genius and he devised the 'normal curve of ability ranging from idiocy at the lowest level to genius at the highest, with fewer persons categorised at either extreme than at any other of the fourteen intermediate points in the distribution' (Tannenbaum in Sternberg, 1988, p.26). His research was based upon examining the achievements of eminent people and proposed to 'illustrate the connection between inherited natural ability on the one hand and the genius level performance on the other' (Gallagher and Courtright in Sternberg, 1988, p.95). Galton established two major concepts, the role of heredity and the level of performance of the individual in relation to their heredity.

His work was followed by the development of tests to measure intellectual abilities of children by Alfred Binet in the early twentieth century. The instrument was 'designed to assist educators in distinguishing between those individuals who could not learn due to inherited or acquired biological deficiencies and those who could learn, but might not, due to a deficient environment - a lack of opportunity or motivation' (Haensly, Reynolds and Nash in Sternberg, 1988, p.129). Binet was not endeavouring to measure intelligence per se, but rather to examine the ability of children to learn.

The Binet tests were modified and Americanised by Lewis Terman and published in 1916. These tests have formed the basis of intelligence tests, known as the Stanford-Binet Intelligence Scale. In addition to the development of the test, a longitudinal study was implemented. It examined the traits characterised by children of high IQ and then followed the children's progress to adulthood (Terman in Barbe and Renzulli, 1981). This research and the development of the intelligence tests are the foundations of the historical study of giftedness. Of Terman, Khatena states that :

> He made unique contributions to our understanding of the intellectually gifted by constructing IQ measures for their identification and by collecting substantial, comprehensive longitudinal evidence that described their behaviours and achievements from childhood to midlife.
>
> (Khatena, 1992, p.35)

2.1.1 American Developments in Giftedness

The economic and social upheavals of the 1920s through to the late 1940s resulted in little investigation of the gifted, however it was a time of innovation and research that required great intellectual effort in other fields. J P Guilford, in his presentation to the American Psychological Association in 1950, reopened the discussion into the nature of creativity and giftedness and the need for greater understanding of their role in education. The 1950s saw a demand not only for research into giftedness but the need for people who could assist in the massive changes that were occurring. The challenge between the Russians and Americans throughout the Cold War became a reality in 1957 with the launching of Sputnik. The Americans were aware of their need to 'catch' the Russians in space technology and considered their failings were a result of the lack of advances in the sciences and the schools were seen as the reason for this failing. Therefore, the late 1950s and 1960s saw funds become available to 'assist in the pursuit of excellence, primarily in the fields of science and technology' (Tannenbaum in Barbe and Renzulli, 1981, p.21). The education arena was also under pressure to implement equal opportunity; however the equal opportunity was not concerned with the level of intellectual achievement but with the

desegregation of schools in America. This new commitment saw many educationalists pursue research on education of the disadvantaged. Gifted education was therefore overshadowed. The use of intelligence tests was also questioned and there was strong opposition to their use with children.

A challenge had been set by the Russians, and President J F Kennedy announced that the Americans would put a man on the moon by 1970. This bold statement increased the demand for science courses and the acknowledgment of those who achieve. But the awareness of and provision for gifted children seemed to be piecemeal and lacked any real commitment. Enrichment and other forms of provision were soon discarded when the cost of maintaining the programs became prohibitive. So the financial cost and the lack of total commitment to any program saw the eventual decline of provisions for gifted children .

The seventies heralded a new era for gifted education. The United States Commissioner of Education, S P Marland reported to Congress on the status of education for the gifted and talented. The recommendations set down by him in 1971 were a result of his concern that 'the gifted (are) a deprived group whose talents are in danger of serious impairment unless appropriate intervention strategies are planned' (Tannenbaum' 1983, p.35). The definition of gifted children formulated by Marland became the basis for understanding and planning for gifted children throughout the world.

> Gifted and talented children are those identified by professionally qualified persons who, by virtue of outstanding abilities, are capable of high performance. These are children who require differentiated educational programs and/or services beyond those normally provided by the regular school program in order to realise their contribution to self and society. Children capable of high performance include those with demonstrated achievement and / or potential ability in any of the following areas, singly or in combination:
>
> general intellectual ability
> specific academic aptitude
> creative or productive thinking
> leadership ability
> visual and performing arts
> psychomotor ability
>
> (cited by Tannenbaum, 1983, p. 77)

This US Federal definition of giftedness has received some criticism since 1971 but it remains a platform for the recognition of gifted children and the role that teachers would be required to take in their education.

2.1.2 State and National Developments in Gifted Education in Australia

Giftedness had entered a new era that witnessed the formation of the World Council for the Education of Gifted and Talented in 1975. The momentum has been maintained through to the 1990s. The interest is still increasing and there is a broadening of public awareness of gifted education and the needs of gifted children.

In Australia, the first State association was formed in 1978 and in the following decade other States followed and a National body was established. These developments began linkages in gifted education that would be maintained to the present time. These associations provided opportunities for parents and teachers to work together.

The increase in activities and interest within New South Wales and Australia can be clearly illustrated in the sequence of events over the last sixty years. The increase in number and variety of National and international activities also indicated the demand for greater awareness and information regarding the education of gifted and talented children.

The major events may be summarised as follows:

1932 'Special Classes for the final years of primary school had been established in NSW. Students were selected on the basis of general ability testing and on recommendations made by school principals.'(Colston, 1988, p. 11). These classes were to be called Opportunity Classes.

1962 The introduction of the Wyndham Scheme in New South Wales schools.

1973	Establishment of the Commonwealth Schools Commission.
July 1975	First World Conference on Gifted and Talented Children - London, held biennially thereafter.
1977	NSW Education Department Report - 'The Education of the Talented Child' - chaired by Dr Colin Macdonald.
June 1978	Victorian Association for Gifted and Talented Children established.
1979	New South Wales Association for Gifted and Talented Children established.
1981	An Advisory Group on the Education of Gifted and Talented Children was established by the Commonwealth Schools Commission - chaired by Dr David Mossenson (Colston, 1988).
1983	TalentEd established - Australia's first national newsletter in the Gifted and Talented field published by Stan Bailey, University of New England, Armidale.
August 1983	New South Wales Department of Education policy on the Education of Children with Special Talents.
August 1983	First National Conference on Education of Talented and Gifted Children - University of Melbourne.
May 1985	Second National Conference on Gifted and Talented Education - Brisbane.
February 1987	Commencement of first Graduate Diploma in Educational Studies - Teaching Gifted Children at Mitchell CAE.

July 1987	First State Conference of the Queensland Association for Gifted and Talented Children.
March 1988	Report of the Senate Select Committee on the Education of Gifted and Talented Children.
April 1988	Appointment of a Management Review Committee to examine all aspects of the Minister for Education and Youth Affairs portfolios - headed by Dr Brian Scott.
September 1988	Committee of Review of NSW Schools instituted.
February 1989	Commencement of Master of Education (Gifted Education) course at Charles Sturt University - Mitchell (formerly Mitchell College of Advanced Education).
July 1989	Australia hosts the Eighth World Conference on the education of gifted and talented children- Sydney.
September 1989	Report published of the Committee of Review of NSW Schools.
November 1989	Excellence and Equity - NSW Curriculum Reform - A White Paper on Curriculum Reform in NSW Schools.
March 1990	School-Centred Education - Management Review: New South Wales Education Portfolio.
1990	The Education Reform Act.
August 1990	Awareness raising program on gifted and talented education for teachers in Metropolitan South West Region - two five hour sessions.
November 1990	Establishment the Macarthur group of the New South Wales Association for Gifted and Talented Children.

January 1991	Introduction of a seventy-five hour certificate course in gifted and talented education by the University of New South Wales.
February 1991	Distribution of NSW Association for Gifted and Talented Children's newsletter to all schools in NSW following a Government grant to the Association.
April 1991	New South Wales Ministerial policy launched (see Appendix 7).
July 1991	Guidelines for Accelerated Progression - published by NSW Board of Studies.
July 1991	Publication of "Inservice Package in Gifted Education" by Charles Sturt University, Faculty of Education for the NSW Department of School Education.
July 1991	Week-long residential inservice for Cluster Directors and two staff members from each region at Charles Sturt University, Mitchell.
July 1991	Five day residential course for parents and teachers - Charles Sturt University, Mitchell.
November 1991	Parent Workshop - co-ordinated by the New South Wales Association for Gifted and Talented Children at the University of Western Sydney, Macarthur.
November 1991	Launch of the New South Wales Department of School Education's policy on the Education of Gifted and Talented Students.
December 1991	Formation of the Ministerial Advisory Committee on the Education of Gifted and Talented Children in New South Wales schools.

February 1992	Teacher workshop - co-ordinated by the New South Wales Association for Gifted and Talented Children - at the University of Western Sydney, Macarthur.
February 1992	Renewal of the New South Wales Government grant to the New South Wales Association for Gifted and Talented to distribute journal 'Gifted'.
April 1992	Australian Association on the Education of Gifted and Talented published the Australasian Journal of Gifted Education.
July 1992	Fifth International Conference on Thinking Skills - Queensland.
August 1992	First Regional competition for Tournament of Minds In Metropolitan South West region.
September 1992	Fourth National Conference in Melbourne on Education of Talented and Gifted Children - 'Creating Opportunities'.
September 1992	State Tournament of Minds, Sydney.
October 1992	Establishment of the Southern Highlands group of the New South Wales Association for Gifted and Talented Children.
October 1992	National Tournament of Minds - Brisbane.
November 1992	Re-establishment of the Macarthur group of the New South Wales Association for Gifted and Talented - as two groups- Macarthur and Sydney West.
December 1992	Renewal of grant from the Minister of Education to the NSW Association for Gifted and Talented to distribute journal -'Gifted'- to Government school and local libraries for a period of two years.

February 1993	Establishment of twelve Opportunity Classes within the Metropolitan South West Region schools.
March 1993	Third State Conference of the Queensland Association for Gifted and Talented Children.
April 1993	First State Conference of the New South Wales Association for Gifted and Talented Children - 'The Gifted Challenge'

The changes in the education for gifted and talented children are a result of the various committees of inquiry that were undertaken during the late 1980s and early 1990s.

In March 1988, the Senate Select Committee handed down its report on the Education of Gifted and Talented Children. The report draws together the submissions of 171 government bodies, other organisations and individuals involved with gifted and talented children and information gained at public hearings held during 1986. In addition, the committee visited schools to 'observe the teaching of gifted children' (Colston, 1988, p.x).

The Senate Select Committee clarified the development of gifted education and gave nine recommendations ranging from the establishment of a national centre for research in the education of gifted children to professional development of teachers and pre-service training courses including sufficient information about gifted children (Colston, 1988, p.177-8). This report gave in-depth information about the education of gifted children and highlighted the areas of concern. Many of these areas are addressed in the subsequent documents of the NSW Department of School Education and the NSW Minister of Education. The role of the Committee was to give recommendations to the Commonwealth which became the basis for subsequent deliberations of the individual States. The Senate Select Committee report thus provided sound research and information on gifted education for the States.

The abundance of documents on education during the late 1980s saw many recommendations and subsequent changes to State Education in New South Wales. Schools Renewal (Scott, 1989) was a review of the 'efficiency and effectiveness of management structure and administrative procedures across the educational portfolio' (NSW Ministry of Education and Youth Affairs, 1989, p.7). This was followed by a more comprehensive report , School-Centred Education (Scott, 1990).

During the same period 'Sir John Carrick chaired a comprehensive review of education in NSW schools with particular reference to the Education and Public Instruction Act, 1987' (NSW Ministry of Education and Youth Affairs, 1989, p.7).

Each of these reports had an impact on the education of gifted and talented children as well as the provisions for training teachers within the regions.

In The Report of the Committee of Review of New South Wales Schools (September 1989), the discussion of equity in education dealt with Gifted and Talented Students and noted that:

> children with marked learning difficulties and those with appreciable physical or intellectual impairments have long been provided with special help in education through remedial support teachers and counsellors. At the other extreme are those children with exceptional gifts and talents. These have sometimes been overlooked and inadequately nurtured in regular schools (Carrick, 1989, p.247-8).

The Committee acknowledged the special needs of the gifted and talented student and put forward seven recommendations. Some of these recommendations are reflected in the 1991 Policy Statement of the NSW Department of School Education as shown:

Recommendation 13.6.8.1
Each school should have the particular responsibility for identifying the child with academic and intellectual gifts, and for ensuring that such children are adequately and appropriately nurtured either within the school or by placement elsewhere, in close consultation with the parents.

Policy statement one
School communities have a responsibility to identify their gifted and talented students.

Policy statement three
Teachers have a responsibility to identify the gifted and talented students in their classes.

Policy Statement five
Regions and schools have a responsibility to coordinate school provisions for gifted and talented students when it is feasible for more than one school to share this responsibility.

Recommendation 13.6.8.3
A variety of options should be available ranging from the normal classroom, to the classroom with special facilities and withdrawal opportunities, special classes, selective schools, senior high schools, cluster school arrangements, external course seminars etc.

Policy statement two
School communities have a responsibility to provide a range of opportunities for their gifted and talented students.

Policy statement four
Teachers have a responsibility to select a variety of teaching strategies for inclusion in programs for the range of gifted and talented students in their class.

Recommendation 13.6.8.4
An independent group undertake periodic reviews of each of the options noted in 13.6.8.3 to determine its effectiveness or otherwise.

Policy statement seven
The Director General and the Central Executive have a responsibility to account for the implementation of Government policy and to report on the outcomes of schooling for gifted and talented students in NSW Government schools.

Recommendation 13.6.8.5
A K - 12 curriculum should be developed as a continuum, allowing for natural (as distinct from lock-step or age-based) progression.

Policy statement 2.1
School Principals have the final responsibility for deciding when the early entry to school of a student who is intellectually gifted and talented is appropriate to meet the student's educational, social and emotional needs

Policy statement 2.2
School Principals have the final responsibility for deciding when any form of accelerated progression is appropriate for individual gifted and talented students in Years K - 12 to meet the student's educational, social and emotional needs.

Recommendation 13.6.8.7
Special training should be provided for all teachers, especially those in selective schools, to identify and cater for the needs of gifted and talented children.

Policy statement six
Regions and schools have a responsibility to provide staff development opportunities in the education of gifted and talented students for principals, teachers and other appropriate personnel.

Even though the policy of the Department is based upon the strategy from the Minister, the recommendations have been clearly supported and implemented at a state level. This clarification of the Carrick recommendations shows the value of completing a 'comprehensive review of education in NSW schools' (Carrick, 1989, p.2).

The introduction of the Cluster Director was a result of recommendations in Schools Renewal (June 1989) - 'a new kind of schools management unit based in a "Cluster" of schools' (p.15). This new structure would see the Cluster Director assuming a 'vital role in both management and educational leadership' (Scott, 1990, p.81). The concept of a cluster director was seen to bring school communities closer together:

> local liaison and co-operation within a cluster should be strongly encouraged so that information and experience can be regularly exchanged through teacher interaction, workshops, school development days and other means. (Scott, 1990, p.81)

In turn, the organisation structure would alter to accommodate the establishment of Educational Resource Centres where the Cluster Directors would have offices. The Educational Resource Centres would include both human and material resources. These facilities have developed throughout the Metropolitan South West region and five Educational Resource Centres are functioning at present. Throughout 1992, the Region was divided into seventeen clusters and then into the five Educational Resource Centres. In November 1992, the number of clusters was reduced to fourteen and some were renamed.

The role of the Cluster Director has been clarified within the documents but some other organisational features emerged. Particular responsibilities were assigned to individual Cluster Directors and this included the responsibility for the education of gifted and talented children. Throughout the last two years, Dr Lyle Whan has been responsible for the area of gifted and talented education within the Metropolitan South West Region.

The future development of programs and training in gifted and talented education within the Metropolitan South West Region are highlighted in the Shaping the Future: Strategic Plan 1992 - 1996 (1991c). In this document, the Assistant Director General 'casts forward five years and focuses on major change programs that will enhance the educational offerings for students in the Metropolitan South West Region of the Department of School Education' (NSW Department of School Education, 1991c, p.40).

The region has a set of beliefs that includes the following:

a democratic society is dependent upon an effective system of public education;

that technological forces will accelerate change in the way social and economic life is conducted;

that education must be assessed in terms of individual achievement relative to ability;

> sound management practices and fiscal responsibility underpin equitable use of resources at all levels;
> that the delivery of planned, relevant, challenging, stimulating and comprehensive curriculum is vital for student development;
> that a well trained and supported staff is essential in public education;
> that parents, teachers and the community are partners in education of children and young adults; and,
> that education is a process of personal empowerment and part of a lifelong process (NSW Department of School Education, 1991c, p.40).

These beliefs focus on the importance of catering for the individual needs of the child, an vital component in catering for the gifted and talented child.

The document then focuses on the five key areas of desired outcomes: students, staff, schools, curriculum and community. For students, it is planned that student support programs will be developed and would 'specifically address the projected needs of various groups including girls, disabled, NESB, *talented* and Aboriginal students' (NSW Department of School Education, 1991c, p.16; my italics). Additionally, the provision of 'professional development programs for teachers which [will] increase skills for understanding how students learn and develop cognitively' (NSW Department of School Education, 1991c, p.16) is one of the strategies to be implemented from 1992.

With regard to career paths and welfare of staff in the region, there is a desire to 'establish a professional development program that complements the work of professional associations' (NSW Department of School Education, 1991c, p.20). This does not specific relationship with an association for Gifted and Talented Children but it does leave an opening for such an avenue for staff development.

The changes to be encountered at the school level include the requirement to 'establish early entry and accelerated progression procedures to facilitate opportunities for **Gifted/Talented** students' (NSW Department of School Education, 1991c, p.24). Similarly, from

1992 the curriculum changes should include the 'development and implementation of a relevant, meaningful and enriched curriculum for Gifted/Talented students' (NSW Department of School Education, 1991c, p.28). Although not directly related to gifted and talented students, it also states that there needs to be support for key learning areas and specific curriculum initiatives - 'resources and implement the Key Learning Areas to ensure equitable outcomes and the achievement of full potential for all students' (NSW Department of School Education, 1991c, p.28).

The involvement of the community in any educational program is vital and this is part of the planning for the region. It is hoped that there will be a promotion of 'community participation' and a utilisation of 'community expertise through school/community liaison programs' (NSW Department of School Education, 1991c, p.32).

While the strategic plan sets out the areas of importance that need to be considered throughout the next five years, it does not provide any method as to how these strategies may be met. The recommendations are focussing in the right direction but do not give the schools and their personnel any specific strategies of how to attain these outcomes.

As can be seen from the above progression, the increase in both pre-service and in-service courses available to teachers has come as response to the demand by the Education Department for teachers to have specialised training in the area. One such course that was available for teachers on gifted and talented education was at the Mitchell campus of Charles Sturt University where an intensive in-service was conducted in July 1991. This seventy-hour workshop was designed for the Department of School Education and its representatives, including one Cluster Director and two teachers from each region in New South Wales.

This workshop brought together academics from various parts of New South Wales to share their knowledge with the teachers and at the end of the course participants received an in-service package of six modules that could be used within their region to use for staff development. The areas covered in the in-service package were Identification, Creativity, a

Curriculum Approach for Mathematics, Acceleration, Policy and its Implementation, and Models of Enrichment. 'The sequence [of presentation of the modules] is irrelevant, and no module should be administered before Module one - The Identification of Gifted Children' (Mares, 1991, Introduction). The concept of the package is that it can be administered 'by any teacher who will follow the instructions to the letter and who will take a few hours to become familiar with the material provided' (Mares, 1991, Introduction). This was the first in-service material available to NSW teachers that was written particularly for them. The work includes workshop activities, answers to the most common questions that may arise, and suggested readings. It was used extensively throughout the Region in the initial stages of staff development.

2.1.3 Metropolitan South West Region Developments

Care must be used in interpreting the various reports of action within the Gifted and Talented Education area. The Annual Reports for 1990 and 1991 for the Metropolitan South West Region both reported on the achievements to date, as well as projections for the following year, in gifted and talented education. In 1990, it was reported that an Association of Gifted and Talented Children was formed in Campbelltown; this entry does not allude to the fact that the group was a part of the New South Wales Association for Gifted and Talented. Similarly, the report for 1991 states that the 'Macarthur Gifted/Talented Association was further developed' (NSW Department of School Education, 1991e, p.47), however, the group disbanded due to lack of leadership and support in this year. Although the initial meeting was held at Macarthur Education Resource Centre and following meetings were sometimes held at the Educational Resource Centre, the input to the subsequent development and collapse of the group were not related to any support or lack thereof from the region or local personnel. As noted in the time-line, the group has re-formed (November 1992) into two groups: Macarthur and Sydney South West. These groups have no affiliation with the Department of School Education; rather, they are groups within the New South Wales Association for Gifted and Talented Children Inc.

A joint initiative of the Region and the University of Western Sydney, Macarthur has been the publication of a journal on education. During 1991 the second edition contained an article entitled, 'The Gifted and Computers: A Partnership of Necessity?'. Such articles indicate a growing recognition of the needs of gifted and talented education within the general education field. This journal is widely distributed throughout the Region.

Within the tertiary education sphere in New South Wales, development of the Graduate Diploma in Educational Studies in Teaching Gifted and Talented Children at Mitchell College of Advanced Education commenced in 1987. This was followed by the introduction of a Masters degree in 1989. The Certificate of Gifted Education at the University of New South Wales commenced in January 1991 and the Educational Doctorate and the Masters courses followed in 1992. Other courses are available at undergraduate level. At the University of Western Sydney, Macarthur, a one semester elective course in gifted education is offered as part of either the Diploma of Teaching or the Bachelor of Teaching. In 1993 two other course were offered by the University of Western Sydney: one a semester course as part of the Bachelor of Education and the other a joint project with the Department of School Education, Metropolitan South West Region through the PRODEC (Professional Development Centre for the Region).

Additionally, throughout the Metropolitan South West Region there have been numerous courses organised by the Educational Resource Centre which involved twelve hours of in-service based on the package developed at Charles Sturt University, Mitchell.

2.2 Definitions of Giftedness

Prior to discussing the methods of identification, the definitions of giftedness require consideration. The importance of initially determining a definition is related to the necessity to link the forms of identification with the definition that is used.

Conceptions of giftedness range from the notion of genius to that of a person exhibiting superior performance or productivity. The definitions, in turn, could be categorised as within the moral, social, economic and educational realms or even as surplus, scarcity, quota and anomalous talents (Tannenbaum, 1983, p.57).

Stankowski classified the definitions into five broad groups (in Davis and Rimm, 1989, p.9). They are:

- after-the-fact - the achievements of an individual are considered after they have been seen as a valuable contribution to society. Galton's work was the first of its kind in promoting this form of defining giftedness.
- IQ based - the acceptance of giftedness is based upon the level of intelligence quotient score. The measurement of intelligence as a method of identifying giftedness followed the research of Galton. Such definitions believe that the test has predictive powers of those likely to achieve eminence.
- percentage based - These definitions rely on an accepted proportion of the population being considered gifted. The percentage may be as low as five percent or as generous as fifteen percent.
- a talent definition focuses on specific abilities in one area.
- creativity based definitions see 'the significance of superior creative abilities as the main criterion of giftedness' (Davis and Rimm 1989, p.10) or as Clark states, 'creativity involves the synthesis of all functioning ... it is the highest expression of giftedness' (Clark, 1983, p.30).

The underlying concept for Tannenbaum is that the talents are valued at various levels depending on their preferences by people. He focuses on the notion of surplus, quota, scarcity and anomalous talents. Scarcity talents are the special abilities which are seen as symbols of excellence, whereas surplus talents are the ones most readily recognised by the public as they beautify our world. Quota talents are those that involve highly specialised skills that are required to produce the goods and services in a market that is limited for these. Anomalous talents focus upon the abilities that one can stretch the mind to achieve certain feats. These divisions of talent indicate the values placed upon certain abilities; however, it also reflects the concentration of the current school curriculum on traditional subjects as potential areas of excellence,

sometimes to the detriment of the more creative domains. Tannenbaum's structure of giftedness does not lend itself easily to formulating methods of identification and, in turn, programs for gifted children. Tannenbaum's theory would be classified as an after-the-fact definition of giftedness in its dependence upon community support for the various talents.

Renzulli approaches the concept of giftedness from the viewpoint of an individual's characteristics on three dimensions: above average ability, task commitment and creativity. It is the intersection of these three dimensions which determine an individual's giftedness. The combination of these characteristics are utilised in planning methods of identification and programs for the gifted in the school setting. He regards the IQ scores as indicative of 'schoolhouse giftedness' because they rely on the measurement of abilities that are 'valued in traditional school learning situations' (Renzulli in Sternberg & Davidson, 1986, p.57) and prefers the notion of creative productive giftedness. Renzulli's Three-ring concept does not discount the superior abilities of the student but broadens the focus to include the other the clusters of traits involved in giftedness. His broader conception coincides with two of Stankowski's categories, the creative area and the percentage group. Renzulli's definition may be more readily translated into methods of identification.

Feldhusen links four distinctive areas within his concept of giftedness. They are general intellectual ability, positive self concept, achievement motivation and talent. These four areas are similar to the work of Renzulli. The talent component encompasses three curricula domains of academic-intellectual, artistic-creative and vocational areas whereas the positive self concept is a 'set of perceptions, interpretations, and evaluations of self and one's own talents, abilities and liabilities' (Feldhusen in Sternberg and Davidson, 1986, p.120). Feldhusen reflects on the multifaceted definitions of intelligence and comes to the conclusion that the required levels of any of the components of giftedness cannot be given but it is accepted that relative high intelligence is required for giftedness. This definition, therefore, is possibly within the IQ definitions while the other areas of talent, motivation and self concept must stay outside the parameters established by Stankowski.

Haensly, Reynolds and Nash draw together four concepts of coalescence, context, conflict and commitment (in Sternberg and Davidson, 1986). Commitment is accepted in the same framework as Renzulli and Feldhusen. Yet coalescence of abilities to produce and the context in which they occur are also important in determining giftedness. The development of a gifted does not occur in a vacuum but as a result of interactions with a working community. This theory moves away from the need for a measurable dimension of giftedness and focuses on the personal and cognitive characteristics of an individual and the environment in which they develop.

Tannenbaum (1983) concedes that giftedness is the overlapping of five factors. General ability is based on tested ability or general intelligence and falls within the category of IQ testing but it is combined with the other four factors of special ability, environmental factors, chance factors, and non-intellective factors which unite talent and the personality characteristics. The special ability needs to be identified as early as possible so it may be catered for but the form of identification is determined by the type of ability. The non-intellective factors are similar to the task commitment of Renzulli and the achievement motivation of Feldhusen but Tannenbaum also adds ego strength and 'willingness to sacrifice short term satisfactions' (Tannenbaum, 1983, p.88). The realm of environmental factors also relates to motivation in the sense that the environment may encourage the child's gifts. Finally, the chance factors are the unpredictable happenings in a person's life. Thus giftedness is the 'potential for outstanding performance or productivity' (in Sternberg and Davidson 1986) in relation to a mix of personal and situational factors.

Gagné, in contrast to his colleagues, emphasises gifts as abilities and talents as performances. The giftedness ability domains cover both general and specific areas. The general abilities must be above average and are within intellectual, creative, socio-emotional and sensori-motor realms. They are affected by catalysts of the environment or personality and then, in turn, produce talent in specific fields. The catalysts delineated by Gagné are similar to some of the factors delineated by Tannenbaum; these include the environment, chance and non-

intellective factors. There is also a link with Renzulli is necessity of motivation for achieve. Gagné's definition may be classified as a talent concept of giftedness.

Taylor utilises the Talent Totem Pole to demonstrate the variety of gifts people may have. He distinguishes between gifted and talented viewing, 'gifted as those who are at the very top in any identified talent area and the talented as those who are between average and gifted in any talent area' (Maker 1982, p.293). He draws attention to six areas: academic, creative, planning, communicating, forecasting and decision making talents. His purpose is to show the problem in narrowly identifying children when many children may have strengths in other talent areas.

An alternative to Stankowski's (1978) classifications of definitions is Davidson and Sternberg's (1986) work in Conceptions of Giftedness. Here they divide the various definitions of giftedness into implicit or explicit theories. An implicit theory is defined as one that cannot be empirically tested and would include the works of Tannenbaum, Renzulli, Feldhusen,and Haensly, Reynolds and Nash. Tannenbaum, Gagné and Taylor are classified as explicit theories that are able to be empirically tested.

Through the discussion on giftedness and talent, it can be seen that the two terms are often used interchangeably and only occasionally clearly differentiated, as in the work of Gagné. Despite the differences among the definitions, they consistently indicate the need for above average ability in at least one area. They also analyse the role that the environment or motivation plays in relation to development of the gifts.

2.3 Identification of Giftedness

The identification process of gifted children is paramount in deciding the type of program to implement at the school level. The definitions cited above determine the ways in which children need to be identified.

Renzulli's Three-ring concept of giftedness is most comprehensively developed into a workable model for identification and provision for gifted children. He states that 'a guiding principle in programming for gifted and talented students is that identification procedures should bear a direct relationship to the types of educational experiences for which the youngsters are being selected' (Renzulli, 1981, p. 39). For this purpose, two types of information required are status and action information. Status information is any objective and/or subjective knowledge about a child that can be gathered and prerecorded for purposes of making decisions about the child. It may be in the form of test results, nomination forms, peer ratings or anecdotal records. Action information 'consists of the dynamic interactions that take place when a student becomes extremely interested or excited about a particular topic' (Renzulli, 1981, p.36).

Renzulli (1981) divides the status information into four categories: psychometric, developmental, sociometric and performance information. Psychometric information refers to tests of cognitive processes and includes intelligence, creative and aptitude tests. Developmental information includes teacher rating scales, biographical information from parents and 'student self ratings or nominations and responses to questionnaires' (Renzulli, 1981, p. 41). Sociometric information is information about an individual that is provided by peers. Performance information includes examples of work, presentations and products.

Clark (1983) also gives suggestions for screening and identifying gifted learners and she classifies them into six areas: generic, cognitive, specific academic, creative, leadership and visual and performing arts (Clark, 1983, p.178-9). For each area, lists of suitable forms and tests are also given. Clark recommends that no form should be used exclusively but a combination of different forms of screening and identifying will yield the most suitable results. The seven forms that are suggested reflect many of Renzulli's suggestions of nomination forms from various people, reports from teachers, family history and background, peer identification, student inventory, work and achievements, and the use of relevant tests.

Baldwin (1984) has designed a matrix to include an array of assessment techniques to assist in the assessment of the gifted and talented child. The forms of assessment discussed are all status information. The components of the matrix are cognitive ability, psychosocial and psychomotor development, creative ability, motivation and creative process. These areas are recommended by Baldwin as giftedness can be 'expressed through a variety of behaviours' (Baldwin, 1984, p.3). The matrix provides space for the inclusion of details of the six assessment areas and it is recommended that at least two forms of identification are used in each area. The concept is to be able to analyse many different forms of identification for one child and to reduce it to a standard value that permits a teacher to gain a profile of one student's ability, highlighting strengths and weaknesses. Comparisons of children are also possible.

Within each area, Baldwin (1984) gives details of the various tests and rating scales that are suitable for use on the matrix. Individual intelligence tests such as the Stanford-Binet or Wechsler Intelligence Scales for Children, which are administered by school psychologists, and various standardised achievement tests and rating scales, which are administered by the class teacher, are recommended for the cognitive area. Similarly, in each of the other five areas Baldwin gives suggestions of suitable materials to use but adds that other forms are also available.

With the broadening of the definition of giftedness, the focus on testing to measure gifts has decreased and there is a greater use of nomination forms, checklists and rating scales. Nomination forms may be used by parents, teachers, peers and individuals themselves. The concept behind these forms is to gain a greater understanding of the child in question. The teacher nomination focuses on the child in the classroom, interaction with peers, ability to complete tasks, level of motivation and interests. Parent nomination and information forms will give historical and developmental data. Peer nomination forms give sociometric information.

2.4 Teaching Strategies

Research and planning strategies that emerged in the seventies saw distinctive curricular materials, teaching models and identification procedures of the gifted and talented become available. In the Schools Council's 1990 paper, 'Australia's Teachers: An Agenda for the Next Decade', it is noted that 'teachers need a wide repertoire of teaching strategies' (Connors, 1990, p.56). Thus to assist the gifted and talented children within a primary school, teachers need to be aware of the various strategies available to them and the suitability of the various methods for different populations.

Even though the development of teaching models in education has not all focussed on the teaching of gifted and talented children, many may be modified to accommodate their learning styles. Joyce and Weil (1992) compiled a comprehensive description of over eighty models of teaching. The diversity of the models will be discussed with reference to their usefulness in catering for gifted and talented children and in addition other specific models for teaching gifted children will be examined.

The four groups of learning theories as given by Joyce and Weil (1992) are:

* the social family
* the information processing family
* the personal family
* the behavioural systems family

Underlying the use of any models given within a theory, is that if they are 'well executed, they work well and they provide positive learning environments for a large range of students. However, they work best when they are adapted to the characteristics of the students' (Joyce, 1992, p.93).

2.4.1 The Social Family Learning Theories

The first of the social family theories, the Group Investigation Model, highlights the need for co-operative learning and working in communities, utilising a democratic process. The teacher's main role is as a facilitator and together with the students, brings together the required resources. The six phases see the students encountering a puzzling situation, exploring reactions to the situation, formulating and organising their study, completing the study and analysing their progress and process. This concept of group investigation lends itself to use in the regular classroom and also in catering for gifted children. The flexibility of the selection of the problem, the variations in the size of the groups and the role of the teacher all encourage independent learning and development at an individual pace. Some guidance is required to ensure that the nature of the puzzling situation is complex enough for the individuals and, in particular, that it relates to the students' interests.

The Role Playing Model is more teacher oriented in that the teacher is required to guide the students through the process. The overall concept is for the teacher to take the students through the nine phases which include warming up the group, selecting the participants, setting the stage, preparing the observers, enacting the role play, discussing and evaluating, the possibility of re-enacting and evaluating and sharing experiences to form a generalisation. As role play is seen to be specifically designed to foster 'the analysis of personal values and behaviour, the development of strategies for solving interpersonal problems and the development of empathy toward others' (Joyce, 1992, p. 70) this model would be of use in some teaching of gifted children, of any age, to assist them in coping with personal problems so often experienced.

The Jurisprudential Inquiry Model is structured and requires an atmosphere that accepts the students and their opinions although the teacher is seen to control the discussions. There is an acceptance of intellectual styles and an openness in the discussion allowing students to develop their own stance on a situation. The six phases that a teacher would guide the students through are an orientation to the case, identification of the issues, the selection of a position on the case,

exploration of the various stances, refining and qualifying the position taken and then testing the assumptions. As this is one of the family models it relies on the union of students in the learning process and so it would be of value in a program catering for gifted children in the primary years or older.

As an alternative to the models that give a workable framework for teaching, the Conceptual Systems Theory focuses on the learner's cognitive complexity. Three basic functions of the teacher are to 'learn to discriminate children according to levels of development', 'create an environment that is matched to the complexity of the student' (Joyce, 1992, p.99) and use the environment to assist in the growth of the individual. This model encompasses the essence of planning for gifted children. The focus is upon the child, not the way in which the teacher should teach. Therefore, it combines the theoretical ideas and relates them to the individual student and is a more logical framework for developing teaching strategies for gifted children. The selection of a suitable environment for a student would relate to the modification of other models of teaching.

2.4.2 Information Processing Family Learning Theory

Within the Information Processing Family it is accepted that the core of good thinking is the ability to solve problems. The Inductive Thinking model utilises three strategies of concept formation, interpretation of data and application of principles. Within these three strategies are various processes such as listing, grouping, making inferences, predicting consequences, and verifying the prediction. The teacher considers the students' level of cognitive activity and relates this to their readiness to work at a particular level. Therefore, in this form the model is structured by the teacher who is the initiator and controller of the activities. This form of organisation for developing thinking would be beneficial in planning for gifted children; however, because the teacher initiates the learning situation, this may stifle some of the interest and motivation of the students.

The Biological Science Inquiry Model relates to research in biology but is applicable in other areas. As this form of teaching focuses more on the student, the framework is useful when working with gifted children. An area of investigation is posed to the students and then they are required to structure the problem, identify the problem in the investigation and speculate ways to assist in overcoming the problem. This concept is the basis of inquiry learning which nurtures the individual as a partner in learning whilst developing the processes of science.

The Concept Attainment Model relies on giving students examples of a certain concept, both positive and negative, and requiring the students to discern the concept illustrated. This form of teaching is teacher controlled and focuses on specific areas of learning. This idea is of value to gifted children if the system is used when new concepts are being learnt and the process is not seen as a whole class strategy to perhaps reinforce rules in Mathematics or English.

The recall of information seems to be spontaneous to some students and for others it is a difficult process. The Memory Model requires the student to examine the material to be learnt and use various techniques to aid in making with the information and there by enhance memorisation. For some children it is necessary to acquire a process to assist memory; however, many gifted children would not require the use of this technique.

Active collaboration between the teacher and student is a characteristic of the Advanced Organiser Model. This requires clarification of the aims of a learning situation in relation to the knowledge and experience of the learner followed by a presentation of the learning task and then a development of the cognitive organisation. This highly structured concept would be of value to teach individual students the way in which to organise their learning but not as a class strategy.

A model which 'promotes strategies of inquiry and the values and attitudes that are essential to an inquiring mind' (Joyce & Weil, 1992, p.209) is the Inquiry Training model. The benefit of this model is that it may be highly structured with the teacher controlling the situation or more freely adapted to the students' needs. The overall outcomes of

such a model is that the students develop skills in observing, collecting and organising data, identifying and controlling variables, formulating hypotheses and explanations, and drawing inferences. Through the six phases, a student is confronted with a problem, collects and organises the data, draws to a conclusion, and reflects on the process. This is a valuable framework to utilise with gifted children as it gives structure for planning and learning without restricting the areas of investigation.

Synectics was introduced to the business world by William J Gordon in the sixties and is seen to 'increase problem solving capacity, creative expression, empathy, and insight into social relations' (Joyce and Weil, 1992, p.219). The underlying concept of Synectics is to use analogies—direct, personal and symbolic—to alter the strange to the familiar and the familiar to the strange and through the process help in solving problems. The process involves teacher guidance; however, once the six stages are mastered students could use the process at any time. In the original form of the theory, the process was not applicable to school students but many modifications have been made to simplify the process so that it is now of value in classroom strategies.

Independent learning and self-directedness are two skills that are desired of gifted children. Treffinger's model for self-directed learning is a

> sequential development of skills in managing individual learning, which builds on the strengths of gifted children, enhances their involvement in their own learning, and increases their motivation by allowing them to study areas of interest to them. (Maker, 1982, p.327)

There are four steps in the model that require the teacher to identify the goals and objectives, assess the entering behaviour, identify and implement instructional procedures, and then assess the performance. Throughout the process, the teacher varies the amount of decision making the pupils are required to do, increasing this through permitting them to select options, then creating options and finally controlling the choices. The teachers must be prepared to change their role from 'the person who makes the decisions to the one who advises, assists, and provides resources for the learning options selected by the students'. (Maker, 1982, p.329) This model is applicable for gifted children as it

develops their ability to become the decision makers in learning by gradually introducing them to the various roles they may undertake.

Benjamin Bloom developed the Cognitive Taxonomy of Educational Objectives. 'The purpose of the taxonomy is to provide a set of criteria that can be used to classify educational objectives according to the level of complexity of the thinking required' (Maker, 1982, p.17). The six levels within the taxonomy are sequenced to guide the preparation of learning tasks. The structure is sequential, moving from knowledge, comprehension, application, analysis, synthesis to evaluation. This taxonomy is utilised by many classroom practitioners as it helps in sequencing work that would be more demanding for the gifted child. It is used as a teaching tool as it evokes types of thinking in each level and, in turn, may improve thinking and feeling processes.

2.4.3 The Personal Family Learning Theories

The third group of models is the Personal Family Models which includes the non-directive theory where the teacher takes on a role as a facilitator and through this role guides the student's growth and development. This form of student-centred learning is ideal for gifted students because they obtain the necessary support and stimulation for their work without being expected to take on an area not of their interest. The unstructured nature of non-directive teaching permits students to initiate their learning situation, explore the problem, discuss what they are learning and draw conclusions about their own work. The motivation for the students comes from the satisfaction of acceptance and understanding from the teacher and peers.

Renzulli's (1985) Schoolwide Enrichment Model relates to the personal family model as it relies on the development of a working relationship between the teacher and student. It is also part of the Information-Processing Family as it involves development of the skills of learning through thinking by the student. The model was developed specifically for use within mainstream schools for the gifted and talented children. The planning in the Enrichment model relies on Renzulli's Three-Ring conception of giftedness which was discussed earlier. Within the

Enrichment program children are involved in three types of experiences. With Type I enrichment, the children participate in general exploratory activities that broaden their outlook of things around them and is not based upon the classroom curriculum. Guidance is given in the model to help with the investigation of the student's interests. Type II focuses on the enrichment processes students would require to achieve their Type III product. Renzulli gives over 250 processes in four areas (Renzulli & Reis, 1985). These processes highlight the numerous strategies available to the teacher in working with gifted children. As the model revolves around the student's interests, motivation is maintained throughout the enrichment procedure.

2.4.4 The Behavioural Systems Learning Theories

The last group of models is classified as the Behavioural Systems Family. Behaviourist theories are based upon the notion of the stimulus-response-reinforcement paradigm. The individually prescribed instruction concept is developed around a specific set of objectives that it is hoped a student will master.

The ultimate form of mastery learning is when the student is catered for through Individually Prescribed Instruction which aims at allowing students to work at their own rates, demonstrating a degree of mastery whilst also encouraging self-direction, self-initiation and evaluation of learning.

Direct Instruction is highly structured and teacher directed in order to maximise student learning time. It is achieved by the teacher establishing the content of the lesson, presenting that information, giving structured and guided practice in that area, and finally encouraging independent practice. This type of teaching model is of use to the gifted child only in the situation where particular information or skills are lacking and need to be taught in a concentrated time framework so the pupil may move on in the area of investigation.

In some instances, a teacher may be required to utilise the Self Control Model. This focuses on working with the student to develop self control

in particular areas. The student takes control of the situation, following the teacher's framework for modifying behaviours. In some situations for gifted children a teacher may need to modify a child's behaviour and this framework gives the scope to allow the child to take control of the situation and work towards a solution to lack of self control.

The strategies discussed are numerous and diverse and illustrate that a classroom teacher need not be limited in the strategies used to cater for the gifted and talented children. In the selection of classroom strategies it is the child who should determine the strategy to be used. That is, the child's abilities, interests, learning style and social/emotional development provide the basis for deciding which strategy is appropriate in that learning situation.

2.5 Educational Options for Gifted Students

All of the models discussed may be used in conjunction with special classroom arrangements and methods of accelerated progression. Gifted children may be grouped according to ability. Clark (1983) outlines a Continuum Model for Ability Grouping which ranges from students remaining in their regular classroom, through to individualised classrooms, cluster groups, pullout programs and special schools.

The regular classroom has not been considered to be adequate in catering for gifted children and therefore alternatives need to be sought. Within the regular classroom, the use of enrichment as well as varying the types of group structures can assist in catering for the gifted. The regular class may be divided into clusters of children who are working in the same area or are of similar ability. Alternatively, the children may be withdrawn from their regular class and participate in activities with children from other classes. Both of these techniques of clustering and pullout may be utilised within the same class at different times.

In an individualised classroom, children are completing tasks commensurate with their ability. Thus a teacher would need to be very organised to cater for the varying levels of ability. This form of teaching may also be linked with cluster and pullout groups which allows the

children to have classes with others and reduces the possibility of isolation they might feel in a totally individualised classroom.

Schools may form specialised classes either as an entity in themselves or in addition to integrated classes. The concept of special classes is considered to be appropriate for highly gifted children. The final alternative in grouping is to organise a special school for the gifted. Within all these alternatives, the teacher should be trained for the position so that the needs and interests of the children are adequately met.

The grouping concepts would be part of the overall planning for a gifted child. The gifted learner may also be catered for through accelerated grade placement, telescoping the curriculum, individual content acceleration and enrichment.

Accelerated grade placement could be as a result of early entry to school, secondary school or university. The reasons and methods of identification for early entry would be determined by the student's background and the availability of suitable programs in the new grade the student would enter. Consideration must be given to the child's suitability for advanced placement as well as the level of knowledge required in the new grade.

Individual progression would allow children to move through the work at their own pace. This allows all children a form of content acceleration. It gives guidance to the teacher regarding the children's abilities. The opportunity to use various forms of programmed instruction such as computer activities is another alternative. A common method of individualising the content of a subject is developing contracts with the students. It is to be hoped that the contracts would be developed by the students and not teacher-enforced so they would be based upon the children's interests. Students may also complete correspondence courses offered through universities and colleges, allowing for individual progression through given information.

Telescoping the curriculum 'is a form of acceleration in which work is covered in a shorter period of time' (Braggett, 1992, p.58). This form of

acceleration may be undertaken by one student or a whole class. For example, when a whole class is involved the required curriculum for high school may be covered in three years instead of four.

Enrichment may take on many forms. However, it is any activity that is designed 'to broaden knowledge, understanding, interests, processes, strategies and skills' (Braggett, 1992, p.83) and 'in this sense denotes experiences that are new, different, and usually unrelated to the total education program' (Clark, 1983, p.287). Enrichment is not considered to be enough in catering for gifted children and must be combined with other provisions.

A form of enrichment is mentoring. A mentor is a person who has expertise in one particular area and is willing to share the interest with a student. The relationship is built around the interest and not seen as a teaching situation. The sharing of ideas is collaborative and non-threatening to either person. A mentor may be used in any curriculum area for most students.

All of these educational options are available to schools; however, in use they must be matched to the needs, interests, strengths and weaknesses of the child. Consideration must also be given to the resources, both human and physical, the money available to implement a program, the time available, the geographical location of the school and the community support of gifted education. Ideally, a school would have developed a policy around these considerations but the implementation may be more closely related to the teacher's background and education.

Chapter Three

Method

3.1 Research Questions

The dual purposes of this research were to ascertain the educational background and the role of the primary school co-ordinator of gifted and talented education within the Metropolitan South West Region of New South Wales.

The research questions are as follows:

1. What is the demographic size and geographical location of the school?
2. What is the academic background and experience of the co-ordinator of gifted and talented education?
3. What policy developments have been made at a school level?
4. What forms of identification have been instituted in the school?
5. What forms of enrichment have been utilised both inside and outside school hours?
6. What forms of acceleration have been adopted in the school?
7. What are the expected roles of the co-ordinator of gifted and talented education in the primary school?
8. What future knowledge is required by the co-ordinator of gifted and talented education?

3.2 Rationale

The expectations placed upon the classroom teacher, school co-ordinator and principal were redefined following the Minister for Education, Youth and Training's Strategy for the Education of Gifted and Talented Students in April 1991 (see Appendix 7) and the publication of the Department of School Education's policy and implementation

strategies for the Education of Gifted and Talented Students in November 1991 (see Appendix 1).

Any change in policy or practice always meets with opposition on at least one of two grounds:

1. no change is necessary; or,
2. the change proposed is the wrong change.

As the proposed changes were of a fundamental nature in the schooling of gifted and talented children, it was considered that an investigation should be undertaken of the interpretations of the implementation strategy at a school level in three areas:

1. the degree of acceptance of the policy;
2. the preparedness of staff for the implementation of the policy; and,
3. the preparation necessary to develop school staff to a satisfactory standard to fully carry out the duties imposed by this policy.

A postal survey was considered to be the most effective means of questioning a large number of schools to obtain the information sought in a form that could be readily analysed. A questionnaire was prepared covering the desired area. (see Appendix 8). To survey a significant number of schools by personal contact would have been impossible given time limitations. It was also considered advantageous to have the information in a written form available for future reference.

Again given the time span available—that is, the initial year of operation of the policy—the survey was limited to a geographically defined area of the education system.

3.3 Design

3.3.1 Instrument

The survey was forwarded to each school together with a stamped addressed envelope for return. The questionnaire consisted of twenty questions, separated into four distinct areas. Section one related to the school and sought particular details about the school's location, its Cluster membership and the size. The total population of children, teachers and number of classes were also required. The two remaining questions about the school were:

Is the school a member of a gifted and talented association? and,

Has the school participated during the past two years in such activities as Tournament of Minds, Minds in Motion or any other similar undertakings?

The question regarding membership of an association was framed because the Minister for Education, Youth and Training had supported the NSW Association for Gifted and Talented Children through a grant to assist in the supply of its journal to every school, in the state. Additionally it was used as an indication as to whether the co-ordinator was aware of the existence of an association or interested enough to become a member.

Since the adoption of the Policy in 1992, there has been an increase in activities for gifted and talented children. Of particular popularity in the Metropolitan South West Region have been the Tournament of Minds and Minds in Motion. Therefore an inquiry was made to ascertain if the school had participated in either of these activities.

Section two of the questionnaire addressed the co-ordinator's background. Eight questions covered this area, ranging from the gender and age of the respondent, through to teaching qualifications, including particular qualifications in teaching gifted children.

Section three examined the school's role in the education of gifted or talented students. Questions sought to determine the existence of a school policy, the provisions made for identification and the specific ways

the school program was adjusted to accommodate the needs of gifted and talented children.

The final section investigated the role of the Co-ordinators in implementing programs and changes within their schools and their feelings of readiness for these duties.

3.3.2 The Formation of the Questionnaire

The underlying concern in planning for any group within a school community is that the personnel involved become aware of the expectations placed upon them. In this instance, it was assumed that a school would co-ordinate the development of a school policy on gifted and talented education that would give guidelines of the procedures to be carried out in that particular environment.

With this in mind, Question 11 regarding the policy for the education of gifted and talented children is paramount. If a school does have a policy, the implementation strategies put forward by the Department of School Education would hopefully be addressed. To ascertain whether the Department's policy has been considered, the questions within the survey relate to specific policy statements of the Department.

The following questions used within the survey were based on the statements within the 1991 Policy Statement of the Department of School Education as indicated below.

Policy Statement One
School communities have a responsibility to identify their gifted and talented students.

Policy Statement Three
Teachers have a responsibility to identify the gifted and talented students in their classes.

The area of identification of gifted and talented students is addressed in Question 15 by ascertaining whether the school uses any formal means of identification .

Question 15 a
Are gifted or talented students at your school formally identified?

If yes, by what means?
- IQ tests
- Other standardised tests
- Teacher nomination
- Parent nomination
- Peer nomination

Policy Statement Two
School communities have a responsibility to provide a range of opportunities for their gifted and talented students.

***2.1** School principals have the final responsibility for deciding when the early entry to school of students who are intellectually gifted and talented is appropriate to meet their educational, social and emotional needs.*

***2.2** School Principals have the final responsibility for deciding when any form of accelerated progression is appropriate for individual gifted and talented students in Years K-12 to meet their educational, social and emotional needs.*

The range of opportunities available for gifted and talented students in the school was sought in Questions eleven and sixteen.

Question 11
Does your school have a specific policy for the education of gifted and talented students?

If yes, when was the policy formally adopted?

Question 16

What special provisions or learning opportunities are made within your School for gifted or talented children?

Year skipping
Accelerated progression
Early entry to kindergarten
Compacting the curriculum for particular students or groups
Mentor programs
Peer tutoring programs
Parent helpers
Special interest clubs

Policy Statement Four

Teachers have a responsibility to select a variety of teaching strategies for inclusion in programs for the range of gifted and talented students in their classes.

Details of teaching strategies were required in Question 18 which covered the range from curriculum content to the learning environment.

Question 18

In what specific ways are the following aspects of the school program adjusted to accommodate the needs of gifted and talented children?

Curriculum content

Is compacted but not extended
or extended or made more complex
or compacted and extended

Teaching methods

Encouraged and assess more divergent thinking
Encourage and assess more deductive reasoning
Providing activities requiring higher order thinking

Development of particular skills
- Additional computer time
- Extra tasks for library research
- Individual reading and language program
- Individual maths program
- Special coaching in sport and athletics
- Opportunities for leadership role
- Creative and practical arts

Learning Environment

Special assistance provided:
- in class time
- outside school but in class time
- outside school and out of class time

Policy Statement Five

Regions and schools have a responsibility to coordinate school provisions for gifted and talented students when it is feasible for more than one school to share this responsibility.

The wider provisions for gifted and talented students were covered in Questions one, two and seventeen.

Question 1

Is the School a member of a Gifted and Talented Association?

Question 2

Has the school participated during the past 2 years in:
- Tournament of Minds
- Minds in Motion
- Any similar undertakings

Question 17

What special provisions or learning opportunities are made for gifted or talented children by your school, but beyond normal school hours?

Activity afternoons
Camps
Competitions
Mentor Programs

Policy Statement Six

Regions and schools have a responsibility to provide staff development opportunities for principals, teachers and other appropriate school personnel in the education of gifted and talented students.

The provision of staff development was the subject of Questions 8, 9,10, 13 and 14.

Question 8

Have you done any specific training in the teaching of gifted children?

a. As part of pre-service training program
b. As part of a postgraduate qualification
c. As part of an in-service program/activity

Question 9

Approximately how much time in total have you spent in training programs **specifically** for the education of gifted and talented children?

Up to 10 hours
11 - 20 hours
21 - 30 hours
31 - 40 hours
> 40 hours

Question 10

In what year was your most recent training for education of gifted and talented children?

Question 13

Does the school provide any special support for the education of gifted and talented children through:

Teacher release time

Financial assistance to staff and/or students

A coordinated mentor program

Question 14

Which, if any, of the following resources are provided by the school specifically for the education of gifted and talented children?

Reference books for teachers

Interstate curriculum materials

Student activity books

Computer software

Other student resources

Policy Statement Seven

The Director-General and the Central Executive have a responsibility to account for the implementation of this policy and to report the outcomes of schooling for gifted and talented students in New South Wales Government Schools.

It is obvious that the release of the report of the Director General and Central Executive will provide other answers and in no way is this survey designed to pre-empt such a report.

3.4 Sample

New South Wales is divided into ten regions for the Department of School Education administrative purposes. These regions vary in geographical size and population. They are:

Metropolitan North Sydney
Metropolitan East Sydney
Metropolitan West Sydney
Metropolitan South West Sydney
Western
Hunter
Riverina
North West
North Coast
South Coast

For the purpose of this study, the Metropolitan South West Sydney was selected. This region covers the area from Thirlmere in the south through to Liverpool in the north and Bankstown in the east and is an expansive geographical area that has both rural and urban development. As the Media Kit (1993) states, 'Culturally rich and geographically diverse, Metropolitan South West region is a growth area populated by over a million people from a wealth of backgrounds' and ranges 'from moderately high density living in some areas of Bankstown and Fairfield to the rural villages of Camden' (Department of School Education draft document). It also has all types of primary schools from PP1 (a school with greater than 700 children) through to PP5 (a school with 150 children or less).

During the period of the research, the region was divided into seventeen Clusters. A cluster is a group of schools co-ordinated by a Cluster Director. The clusters are then linked together and form an Educational Resource Centre. The region is divided into five Educational Resource Centres: Macarthur Educational Resource Centre, Glenfield Educational Resource Centre, Chester Hill Educational Resource Centre, Bankstown Educational Resource Centre, Cartwright Educational Resource Centre. The Assistant Director General within the Department of School Education, Dr Alan Laughlin, is responsible for the region.

Region
Metropolitan South West Region

Educational Resource Centres

Bankstown	Cartwright	Chester Hill	Glenfield	Macarthur

Clusters

Bankstown	Bossley Park	Canley Park	Glenfield	Campbelltown
Birrong	Busby	Fairfield	Leumeah	Narellan
East Hills	Liverpool		Macquarie Fields	Picton
	Miller		Raby	Rosemeadow

The region has a nominated Cluster Director co-ordinating the development of initiatives for the education of gifted and talented children. He is assisted in this task by a regional committee. Each Educational Resource Centre also has developed a committee to examine the various aspects of the education of gifted and talented children, in particular the in-servicing of teachers and the co-ordinating of additional out-of-school activities for the children.

All primary schools within the Metropolitan South West Region were part of the sample in the survey, the total number being 135 schools (see Appendix 4).

3.5 Procedure

For research to be undertaken within a specific region of the Department of School Education,an application for research must be submitted to the Research and Evaluation Committee of the Department. In this instance, the application for research required a copy of the instrument as well as a supporting letter from the University of Wollongong. The research was

approved at a school level but was subject to the willingness of the school principals involved. As a requirement of the Regional Committee for Research, the surveys were addressed to the principal of each school in the first instance, informing them of the reason for the survey and then asking for the survey to be passed onto the relevant person. An additional letter was addressed to the co-ordinator giving them, an overview of the rationale for the survey. Similarly the follow-up telephone calls were made to the principals.

Two accompanying letters were attached to the survey questionnaire, one addressed to the Principal and the other to the Co-ordinator of Gifted and Talented education (see Appendices 9 & 10).

A questionnaire was posted to each school. It was only identifiable by the name of the school with the identification of the co-ordinator not required. The details of educational background, age and gender of the co-ordinator were sought to determine whether the respondents reflected the cross-section of teachers to be found throughout the system.

The questionnaire totalled six pages but allowed plenty of space between questions to facilitate ease of reading and response. The instructions for completion were kept to a minimum to ensure that the form could be filled in quickly and with little inconvenience to the co-ordinator.

3.6 Data Gathering

Surveys were distributed to the 135 primary schools within the Metropolitan South West Region in October 1992. Each survey was addressed to the Principal of the school and included a letter to the Principal, a letter to the Co-ordinator, the survey and a stamped addressed envelope for the return of the information. A follow-up of schools which had not replied was commenced after an interval of four weeks.

The analysis of the questionnaire surveys is on three levels. Firstly, a regional overview of the responses is given. This takes the form of

frequency charts and as percentages of the whole region. Secondly, a comparison between the Educational Resource Centres, is presented to determine if there has been a predominance of work carried out in any one area. Thirdly an examination of the Clusters within the region is used to indicate similar comparison among Clusters.

Chapter four

Presentation and analysis of data

4.1 Overview

The original survey responses from the schools are shown in their complete form in Appendix 11. Details of the school have been verified with statistical data from the NSW Department of School Education records. The details of the Educational Resource Centres, and the size of the schools have been verified in the NSW Department of School Education, Metropolitan South West Region's Directory.

Questions one and two sought input related to specific activities involving gifted and talented children undertaken by the school. The first question addressed whether the school is a member of a gifted and talented association within Australia. It was assumed that a school interested in developing its knowledge of the field may have chosen to join an association devoted to that end. It has been possible to check the accuracy of the responses against the records of the New South Wales Association for Gifted and Talented which is the only such organisation in this State. Question two related to the participation of the school in region wide activities commenced during 1991 and 1992, particularly Tournament of Minds and Minds in Motion. It was also possible for schools to indicate other activities in which they participated.

Questions three to ten were specifically related to the co-ordinator. Personal details of gender and age, teaching experience and educational qualifications were sought. These questions were followed with an inquiry regarding the co-ordinator's membership of a professional association other than an industrial union. The final

questions related to the specific training that the co-ordinator had undertaken in gifted and talented education.

The next section related to the school's role in the education of gifted or talented students. The overall concept behind this area of questioning was to see how the school was developing its provision for gifted children. Details sought included the existence of a school policy, the role of the co-ordinator in the development of the policy, methods of identification and forms of differentiation.

The final section sought to determine future needs. Co-ordinators were required to indicate the responsibilities they were expected to accept and which ones they considered to be most important. Finally they were asked if they considered themselves adequately prepared for the role of co-ordinator and if not, to indicate the areas in which they required additional information and skills.

4.2 Data Returns

4.2.1 Demographic Information

Of the 135 primary schools within the region, a total of 72 schools responded. This is a return rate of 53.3 %. All schools who had not responded were contacted by telephone and prompted to complete the survey. Nineteen schools responded to the follow-up call. This represented a further 26% of the total returns.

In light of the fact that mail questionnaires generally attract 15-50% response rate (Burns, 1990), the return of 53.3% was considered acceptable. Nevertheless, the timing of the postal survey in the second week of fourth term may have affected the number of responses received.

Table two indicates the percentage of survey returns for each cluster:

CLUSTER	Total	Returns	Percent
Bankstown	9	4	44.4
Birrong	9	5	55.5
Bossley Park	8	3	37.5
Busby	9	7	77.7
Campbelltown	6	4	66.6
Canley Park	8	5	62.5
East Hills	11	7	66.6
Fairfield	9	5	55.5
Glenfield	9	2	22.2
Leumeah	7	4	57.1
Liverpool	7	4	57.1
Macquarie Fields	4	2	50
Miller	8	4	50
Narellan	9	5	55.5
Picton	11	4	36.4
Raby	6	5	83.3
Rosemeadow	5	2	40

Table 2: Returns by cluster

The response rate was constant throughout the region, with an overall average of 53.3% as previously indicated. Macarthur Educational Resource Centre had the lowest rate of return at 48.4 % and Chester Hill Educational Resource Centre the highest with 58.8 %. It was also noted that Raby Cluster, part of Glenfield Educational Resource Centre, had an overall response rate of 83.3 %.

The Region includes schools of various sizes ranging from a Class 5 (PP5) school with an enrolment of under 150 through to a Class 1 (PP1) school with an enrolment of more than 700 pupils. The breakdown of the respondent schools within the region based on their size is indicated in table 3.

Class	Number	Percent
PP1	13	18.0
PP2	19	26.4
PP3	22	30.6
PP4	13	18.0
PP5	5	7.0

Table 3: Size of schools in Metropolitan South West Region

Table 4 shows the Educational Resource Centre to which these respondent schools belong.

	PP1	PP2	PP3	PP4	PP5	Total
Bankstown	1	2	7	4	2	16
Cartwright	2	4	6	4	2	18
Chester Hill	2	5	2	1	0	10
Glenfield	7	4	1	1	0	13
Macarthur	1	4	6	3	1	15
	13	19	22	13	5	72

Table 4: School size by Educational Resource Centre

4.2.2 School Activity Responses

Responses to each question are presented by Region in the first instance and where appropriate, elaborated with Educational Resource Centre data.

Question one sought indication of the school's membership of a Gifted and Talented Association. As indicated in the table below 37.5% of schools responded in the affirmative.

YES	27	37.5%
NO	45	62.5%

Table 5: Membership of an Association

When the schools' responses are analysed by Educational Resource Centre, the figures support this general trend for all except Cartwright and Glenfield Educational Resource Centres.

	YES	NO	Total
Bankstown	5	11	16
Cartwright	9	9	18
Chester Hill	3	7	10
Glenfield	6	7	13
Macarthur	4	11	15

Table 6: Association Membership by Educational Resource Centre

The school's participation during the past 2 years in special activities, including Tournament of Minds and Minds in Motion, are indicated in the tables below.

Tournament of Minds		
YES	18	25%
NO	50	69%
Don't know	4	6%

Table 7: Schools participating in TOM

Minds in Motion		
YES	42	58%
NO	26	39%
Don't know	2	3%

Table 8: Schools participating in Minds in Motion

Other similar undertakings		
YES	43	60%
NO	28	39%
Don't know	1	1%

Table 9: Schools participating in other activities

Where schools were involved in similar undertakings, they detailed the activities as follows: Open Minds, Cluster enrichment programs, school writer's workshop, after school classes, Mathematics days, Mathematics and English competitions and non-residential camps. Tournament of Minds is new to the Region and thus it was not surprising that few schools had taken part in this activity. Minds in Motion, for example, attracted a participation level of 58%.

4.2.3 Co-ordinator Details

The age range of the respondents is evenly spread as indicated below:

Years	Total
20-29	21
30-39	24
40-49	20
50+	7

Table 10: Age of respondents

While this pattern holds for most Educational Resource Centres, it is interesting to note that Cartwright Educational Resource Centre has attracted a much larger number in the 20-29 age bracket.

	20-29	30-39	40-49	50+
Bankstown	4	4	6	2
Cartwright	10	3	3	2
Chester Hill	1	5	3	1
Glenfield	3	6	4	0
Macarthur	3	6	4	2
	21	24	20	7

Table 11: Age of respondents by Educational Resource Centre

Information regarding the respondents' teaching experience in general and at their present school is depicted in tables 12 and 13. The total teaching experience of the co-ordinators ranged from 2 years to 37 years with the majority having less than twenty years' experience.

Years	Tally
1-5	14
6-10	18
11-15	11
16-20	14
21-25	6
26-30	6
31-35	2
36-40	1

Table 12: Respondents' total teaching experience

The length of time a co-ordinator had been employed at the present school ranged from one to seventeen years, as indicated below.

Years	Tally
17	1
12	2
11	1
8	5
7	5
6	5
5	9
4	11
3	12
2	15
1	6

Table 13: Respondents' experience at present school

The qualifications held by the co-ordinators is illustrated in tables 14 and 15.

Higher degree	7
4 year training	38
3 year training	19
2 year training	8
Other	0

Table 14: Teaching qualifications

	Higher	4 year	3 year	2 year
Bankstown	1	6	7	2
Cartwright	3	9	5	1
Chester Hill	1	4	3	2
Glenfield	2	8	2	1
Macarthur	0	11	2	2
	7	38	19	8

Table 15: Qualifications of teachers by Educational Resource Centre

As indicated in these tables, qualifications ranged from a two year qualification through to a higher degree with the majority having three- and four-year trained status. However, the specialised training in gifted and talented education training was predominantly received as part of an in-service activity (see table 22. p.62).

The co-ordinator's personal membership of professional associations in education is indicated in table 16.

YES	46
NO	26

Table 16: Membership of Professional Associations

Although 46 co-ordinators indicated membership of professional associations only 13 of these were particularly concerned with the education for gifted and talented children.

YES	13
NO	59

Table 17: Membership of Gifted and Talented Associations

Bankstown	5
Cartwright	4
Chester Hill	1
Glenfield	3
Macarthur	0
	13

Table 18: Membership of Gifted and Talented Associations by Educational Resource Centre

The majority of specialist training in gifted and talented education has occurred at the in-service level. This finding is not surprising in light of the elective nature of pre-service courses and the recent introduction of graduate level courses in New South Wales.

YES	23
NO	49

Table 19: Training at Pre-service Level

Bankstown	1
Cartwright	9
Chester Hill	2
Glenfield	7
Macarthur	4
	23

Table 20: Training at Pre-service Level by Educational Resource Centre

YES	9
NO	63

Table 21: Training at Post-graduate Level

YES	68
NO	4

Table 22: Training at In-service Program

The total amount of time spent in specialised training for the education of gifted and talented children varied greatly as indicated in tables 23 and 24.

Hours	Number	Percent
Up to 10 hours	17	24
11 to 20 hours	24	33
21 to 30 hours	11	15
31 to 40 hours	5	7
Greater than 40 hours	15	21

Table 23: Hours Involved in Training Programs

	>10	11-20	21-30	31-40	>40
Bankstown	2	7	5	1	1
Cartwright	7	4	2	0	5
Chester Hill	2	3	0	0	5
Glenfield	2	4	3	1	3
Macarthur	4	6	1	3	1
	17	24	11	5	15

Table 24: Hours Involved in Training Programs by Educational Resource Centre

In order to determine which clusters could benefit from additional training activities, an analysis of the level of expertise within those clusters was constructed. As indicated by table 25, the majority of Clusters lacked schools with highly trained co-ordinators.(thirty hours' plus training). The notable exceptions were Canley Vale Cluster with three schools exceeding 40 hours' training and Picton Cluster with three schools indicating 31-40 hours' training.

	>10	11-20	21-30	31-40	>40
Bankstown	0	1	3	0	0
Birrong	2	2	1	0	0
Bossley Park	2	0	0	0	1
Busby	3	2	1	0	1
Campbelltown	3	1	0	0	0
Canley Vale	0	2	0	0	3
East Hills	0	4	0	1	1
Fairfield	2	1	0	0	2
Glenfield	1	0	0	0	1
Leumeah	0	1	2	1	0
Liverpool	1	1	0	0	2
Macquarie Fields	0	0	1	0	1
Miller	1	1	1	0	1
Narellan	1	2	1	0	1
Picton	0	1	0	3	0
Raby	1	3	0	0	1
Rosemeadow	0	2	0	0	0
	17	24	11	5	15

Table 25: Hours Involved in Training Programs by Cluster

The recency of training for education of gifted and talented children was also considered important because of the burgeoning of research and development which has altered the field in recent years.

Year	Total
1982	2
1990	2
1991	13
1992	55

Table 26: Year of Most Recent Training by Co-ordinator

4.2.4 School's Role in The Education of Gifted or Talented Students

A total of 40% of schools had developed their own policy in relation to gifted and talented children, while a further 47% were still in the deliberation phase. Of those with a policy, the majority had completed and adopted it in 1992. It is important to note that not all co-ordinators had been involved in the development of the school policy. The responses are illustrated below:

YES	29	40%
NO	9	13%
Under consideration	34	47%

Table 27: Adoption of Policy by School

	Total	YES
Bankstown	16	7
Cartwright	18	8
Chester Hill	10	6
Glenfield	13	6
Macarthur	15	2
	72	29

Table 28: School Policy Adoption by Educational Resource Centre

The majority of schools produced their policy following the release of the NSW Department of School Education's Policy in 1991, as indicated in table 29. One school responded that it had a policy but gave no indication of the year in which it had been formally adopted.

Year	Total
1980	1
1986	1
1988	2
1989	1
1990	7
1991	5
1992	11

Table 29: Year of Policy Adoption by School

As table 30 indicates, approximately two-thirds of the current co-ordinators, had been personally involved in developing or modifying their school's policy statement.

YES	49
NO	23

Table 30: Number of Co-ordinators Involved in Policy Development

The nature and degree of school support for gifted and talented education initiatives is indicated in tables 31, 32 and 33.

YES	19
NO	53

Table 31: Number of Schools Providing Teacher Release Time

YES	30
NO	42

Table 32: Number of Schools Providing Financial Assistance

YES	7
NO	65

Table 33: Number of Schools Providing a Co-ordinated Mentor Program

The distribution of special support given by schools by Educational Resource Centres appears below. On the basis of these figures, the Macarthur Educational Resource Centre has demonstrated a higher level of support in the field of gifted and talented education.

	Release	Finance	Mentor
Bankstown	2	4	2
Cartwright	0	7	1
Chester Hill	3	5	1
Glenfield	5	5	2
Macarthur	9	9	1
	19	30	7

Table 34: Level of Support by Educational Resource Centre

Other ways in which schools may support the development of gifted and talented education is in the provision of material resources.

	Yes	No
A: Reference Books for teachers	58	14
B: Interstate curriculum materials	13	59
C: Student activity books	14	58
D: Computer software	47	25
E: Other student resources	35	37

Table 35: Material Resources by School

	A	B	C	D	E*	Total
Bankstown	14	2	3	10	6	16
Cartwright	14	1	4	14	11	18
Chester Hill	8	2	2	5	2	10
Glenfield	12	4	4	10	9	13
Macarthur	10	4	1	8	7	15
	58	13	14	47	35	72

* categories coincide with those indicated in table 35.

Table 36: Schools' Material Resources by Educational Resource Centre

Although most schools indicated their provision of reference materials and computer software, many of these materials are not specifically created for gifted children.

Most schools indicated that they used a combination of methods in the identification of gifted and talented children (see tables 39 and 40). As can be seen in the following tables, teacher nomination was the most highly favoured method of identification.

YES	63
NO	9

Table 37: Number of Schools with Formal Identification Procedures

	Yes	No
IQ tests	43	29
Other standardised tests	28	44
Teacher nomination	65	7
Parent nomination	54	18
Peer nomination	19	53

Table 38: Methods of Identification Used by School

	IQ	Tests	Teacher	Parent	Peer	Total
Bankstown	11	5	16	12	4	16
Cartwright	13	10	17	15	4	18
Chester Hill	4	1	7	6	2	10
Glenfield	6	6	11	10	4	13
Macarthur	9	6	14	11	5	15
	43	28	65	54	19	72

Table 39: School Method of Identification by Educational Resource Centre

Cluster	IQ	Tests	Teacher	Parent	Peer
Bankstown	3	0	4	3	0
Birrong	2	2	5	3	1
Bossley Park	3	1	3	3	0
Busby	5	3	7	5	3
Campbelltown	2	2	4	3	0
Canley Vale	2	5	3	2	0
East Hills	6	3	7	6	3
Fairfield	2	1	4	4	2
Glenfield	1	0	1	1	1
Leumeah	3	4	4	4	1
Liverpool	3	4	4	4	1
Macquarie Fields	1	1	2	2	1
Miller	2	2	3	3	0
Narellan	1	1	5	4	3
Picton	4	3	4	4	2
Raby	1	1	4	3	1
Rosemeadow	2	0	1	0	0
	43	28	65	54	19

Table 40: School Method of Identification by Cluster

There was also great variety among schools in the special provisions or learning opportunities for gifted or talented children, as indicated in tables 41,42 and 43. Special interest clubs were the most common form of provision while mentor programs were the least popular. Again, the relative proliferation of special interest clubs may be attributed to their origin as an opportunity for all children rather than their being targeted for gifted and talented children.

Provision	Yes	No
A: Year skipping	16	56
B: Accelerated progression in particular subjects	27	45
C: Early entry to kindergarten	18	54
D: Compacting the Curriculum for particular students	17	55
E: Mentor programs	10	62
F: Peer tutoring programs	33	39
G: Parent helpers	34	38
H: Special interest clubs	37	35

Table 41: Nature of Provisions by School

	A	B	C	D	E	F	G	*H
Bankstown	1	6	3	3	2	6	9	7
Cartwright	3	9	3	5	2	9	7	9
Chester Hill	3	1	3	0	2	2	4	8
Glenfield	4	9	4	6	3	8	6	6
Macarthur	5	2	5	3	1	8	8	7
	16	27	18	17	10	33	34	37

* categories coincide with those indicated in table 41.

Table 42: School Provision by Educational Resource Centre

Cluster	A	B	C	D	E	F	G	*H
Bankstown	0	0	1	0	1	1	2	1
Birrong	0	3	0	0	0	1	2	2
Bossley Park	1	0	0	0	0	2	2	1
Busby	0	5	2	1	2	4	2	3
Campbelltown	2	1	1	1	0	4	3	2
Canley Vale	3	1	2	0	0	1	2	5
East Hills	1	3	2	3	1	4	5	4
Fairfield	0	0	1	0	2	1	2	3
Glenfield	1	1	0	2	1	0	0	0
Leumeah	0	3	1	0	0	3	2	2
Liverpool	2	2	1	2	0	2	2	3
Macquarie Fields	1	1	0	1	0	2	2	2
Miller	0	2	0	2	0	1	1	2
Narellan	30	0	3	0	0	2	3	2
Picton	0	1	0	1	0	2	2	3
Raby	2	4	3	3	2	3	2	2
Rosemeadow	0	0	1	1	1	0	0	0
	16	27	18	17	10	33	34	37

* categories coincide with those indicated in table 41.

Table 43: School Provisions by Cluster

A number of schools indicated that additional provisions or learning opportunities were made for gifted and talented children that were extra-curricular in nature. Most schools favoured competitions as a learning opportunity for their children. Again, this form of provision minimises the role and responsibilities of the school in the organisation of such activities.

Provision	Yes	No
Activity afternoons	25	47
Camps	19	53
Competitions	42	30
Mentor programs	4	68

Table 44: Extra-Curricular Provision by School

	Activity	Camps	Comp.	Mentor	Total
Bankstown	4	5	8	0	16
Cartwright	5	4	14	2	18
Chester Hill	4	2	5	1	10
Glenfield	4	1	7	1	13
Macarthur	8	7	8	0	15
	25	19	42	4	72

Table 45: School Extra-Curricular Provision by Educational Resource Centre

Schools were asked to indicate the ways in which they differentiated the curriculum in order to accommodate the needs of gifted and talented children. In order to meet the educational needs of gifted and talented children, various methods were utilised by the schools. Curriculum modifications focussed on the four areas of content, process, product and environment. School responses in each of these areas are tabled below.

Is compacted but not extended	4
Extended or made more complex	37
Compacted or extended	19

Table 46: Curriculum Content Modifications by School

Encourage and assess more divergent thinking	52
Encourage and assess more deductive thinking	42
Providing activities requiring higher order thinking	56

Table 47: Teaching Method Modifications by School

Additional computer time	37
Extra tasks for library research	48
individual reading and language program	36
Individual maths program	32
Special coaching in sport and athletics	30
Opportunities for leadership role	54
Creative and practical arts	38

Table 48: Skill Development Modifications by School

Special assistance provided:	
in class time	59
outside school but in class time	21
outside school and out of class time	23

Table 49: Learning Environment Modifications by School

4.2.5 Co-ordinator's Role

The final section of the survey sought details of the co-ordinators' perceptions of the role expected of them and the role they considered most important. From the list of suggested roles, most respondents considered planning and implementing a gifted and talented program as their most important role. A large number of respondents, however, nominated attendance at in-service programs as the role most expected of them.

	Expected roles	Important roles
Attend in-services programs on gifted and talented	54	30
Give inservice programs on gifted and talented education	40	31
Develop methods for identification of the gifted and talented	43	30
Plan and implement programs for the gifted and talented	47	43
Liaising with parents	36	14
Coordinate outside school activities	28	9
Be a member of relevant Cluster, ERC committee	37	12

Table 50: Co-ordinators' Perceptions of Their Role

Co-ordinators were also asked to indicate their perception of how adequately they were prepared to perform the tasks expected of them. A total of 59% of the respondents considered themselves adequately prepared for their role as co-ordinator, although only 14% of the total respondents had had any postgraduate training in the area.

YES	42
NO	30

Table 51: Co-ordinators' Perception of Preparedness

ERC	Yes	No
Bankstown	9	7
Cartwright	10	8
Chester Hill	8	2
Glenfield	8	5
Macarthur	7	8
	42	30

Table 52: Co-ordinators' Perception of Preparedness by Educational Resource Centre

Cluster	Yes	No
Bankstown	2	2
Birrong	2	3
Bossley Park	3	0
Busby	2	5
Campbelltown	1	3
Canley Vale	4	1
East Hills	5	2
Fairfield	4	1
Glenfield	1	1
Leumeah	3	1
Liverpool	5	0
Macquarie Fields	1	1
Miller	1	3
Narellan	3	2
Picton	2	2
Raby	3	2
Rosemeadow	1	1
	42	30

Table 53: Co-ordinators' Perception of Preparedness by Cluster

Respondents were requested to nominate the additional information and skills they required in order to perform the role of co-ordinator.

better understanding of identification strategies	17
a wider range of problem solving techniques to use with children	36
alternative curriculum models	26
methods for assessing creativity	26
advice on early entry to school	10
information on accelerated progression	14
developing and implementing mentoring programs	25
information on new teaching strategies	35

Table 54: Co-ordinators' Perceptions of Information and Skills Required

The areas in which respondents requested additional training and information were as follows:

- identification and or assessment;
- teaching - curriculum models, strategies and problem solving techniques; and,
- specific strategies - early entry, mentoring and acceleration.

The most common responses were problem solving techniques and new teaching strategies. Some respondents who considered themselves adequately prepared for the position also indicated areas they would like additional information and skills; these included identification strategies, problem solving techniques and teaching strategies.

Chapter five

Conclusions and Recommendations

5.1 Conclusions

In order to facilitate analysis of the data obtained by the questionnaire, Table 55, on the following page, was constructed.

The Educational Resource Centres each comprise approximately thirty schools, except for Chester Hill which includes only seventeen. Individually, the clusters were a collection of various-sized schools of which most are in the medium-size range. However it was noted that Robert Townson, St Andrews and Governor Philip King all had over one thousand pupils. The smallest schools, which replied to the questionnaire, were Sefton Infants, with 67 pupils and Mount Lewis Infants with 93 pupils.

Of the 135 schools in the Metropolitan South West Region who received the survey only seventy two replied, a total of 53.5%. The analysis of response by cluster shows several areas with over 65% returns, including Busby, Campbelltown, East Hills and Raby; other clusters had less than 40% returns and these included Glenfield, Bossley Park and Picton. On a broader basis, however, an analysis of response by Educational Resource Centre indicates a smaller variation, ranging from Macarthur on 48.4% to Chester Hill at 58.8%

It is not possible to accurately determine the reasons for schools failing to respond to the questionnaire. Analysis of the data showed no consistent patterns that would allow such inferences to be made. For example, Narellan and Picton Clusters are almost entirely rural yet while Picton

Cluster	A	B	%	School size - by class					C	D	E	F	G	H	I
				1	2	3	4	5			%			%	
Bankstown	9	4	44.4	1		1	1	1	0	0	0	12	3	25	U
Birrong	9	5	55.5		2	1	1	1	2	1	20	15	4	26.7	U
Bossley Park	8	3	37.5	2				1	2	1	33.3	9	3	33.3	U
Busby	9	7	77.7		2	2	2	1	3	1	14.3	21	7	33.3	U/R
Campbelltown	6	4	66.6	1	2	1			0	0	0	12	3	25	U
Canley Park	8	5	62.5	2	3				0	0	0	15	8	53.3	U
East Hills	11	7	66.6			5	2		3	2	28.6	21	9	40.9	U
Fairfield	9	5	55.5		2	2	1		3	2	40	15	9	57.2	U
Glenfield	9	2	22.2		1	1			1	1	50	6	5	83.3	U
Leumeah	7	4	57.1	1	2		1		2	0	0	12	8	66.7	U
Liverpool	7	4	57.1		2	2			2	2	50	12	5	41.7	U
Macquarie Fields	4	2	50	2					0	0	0	6	3	50	U
Miller	8	4	50			2	2		2	1	25	12	5	41.2	U
Narellan	9	5	55.5		1	1	2	1	3	1	20	15	8	53.3	R
Picton	11	4	36.4			3	1		1	0	0	12	7	58.3	R
Raby	6	5	83.3	4	1				3	2	40	15	7	46.7	U
Rosemeadow	5	2	40		1	1			0	0	0	6	3	50	U/R
	135	72							27	14	216	97			

A: Number of Schools in the Cluster
B: Number of Schools Responding to the Survey
%: Percentage of Schools Responding to the Survey
School Size: categories 1 - 5 equate with school population (see p.)
C: Membership of a Gifted and Talented Association
D: Membership of NSW Gifted and Talented Association
E: Percentage of Schools Members of NSW Gifted and Talented Association
F: Total Activities Available to the Cluster
G: Total Activities Participated in by Cluster
H: Percentage of Total Activities Participated In
I: Type of Geographical Region - U=Urban, R=Rural.

Table 55: Cluster Analysis

showed a very low return (36.4%), not Narellan which was above the mean (55.5%). Similarly, Glenfield, an urban area, gave the lowest return of 22.2% and other urban clusters such as Bankstown, Bossley Park, Macquarie Fields and Miller were all below the mean.

Rosemeadow (40%), a mixed urban-rural area, had a low response rate whereas Busby a similarly mixed cluster returned one of the higher values (77.7%). From these data, it is apparent that geographical location had little effect on the completion and return of the questionnaire.

It is possible that schools failed to respond because of their lack of familiarity with issues in gifted and talented education which hampered their ability to readily interpret the language of the survey. Alternatively, schools may not have appointed a co-ordinator and therefore they saw no reason to complete the survey. Finally, it is also possible that the questionnaire was not given to the co-ordinator as it was a requirement of the Regional Committee for Research that the surveys were addressed to the Principal. Informal conversations with teachers have suggested that this is a viable explanation for lack of response.

The actual membership status of schools in a gifted and talented association was disappointing. Of the twenty seven schools who reported membership of an association, only fourteen (19.4%) were actually members of the New South Wales Association. Although there are other associations, it is unlikely that any local schools belong to these because they are not as easily accessible as the NSW Association. It is possible that schools believe themselves to be members because all schools in New South Wales receive copies of the Association's bimonthly publication "Gifted".

Utilising the NSW Gifted and Talented Association membership details, 50% of the respondent schools in the Glenfield and Liverpool Clusters are members. Seven clusters, however, include no schools as members. Association membership did not correlate with any other indicator of a school's awareness of issues relating to gifted and talented education.

Analysis of the data related to extra-curricular activities such as Tournament of Minds and Minds in Motion reveals a high proportion of involvement by schools (see column G, Table 55). The numerical total of such activities was three times the total number of schools responding to the survey. An interesting phenomenon was that Glenfield Cluster, with the lowest ratio of returns, returned the highest participation rates in

these extra-curricular programs. By contrast, Campbelltown Cluster, which had a high return rate, also had the lowest participation rate in extra-curricular activities. However, such inverse relationships were not consistent across clusters as Birrong, Bossley Park, Busby, East Hills, Liverpool and Miller all had below average rates; yet Busby and East Hills had high return rates and Miller low return rates with Bossley Park a very low rate. Therefore, it may be concluded that there was no relationship between a school's involvement in extra-curricular activities and its failure to complete the survey.

The majority of co-ordinators were female which reflects the proportion of female to male teachers in the region. The age of respondents also reflected the distribution of ages among the general teaching population in the region. Teaching experience of co-ordinators ranged from two years to thirty seven years with the majority claiming experience in the six to ten year range (26.4%) and most (73.6%) had been at their present school for less than six years. Teachers who take on the role of co-ordinator tend to have a reasonable level of experience but are relatively new to their present teaching environment. It is not possible to extrapolate from these data what the teachers' motivation may be for accepting the position of co-ordinator. Neither is it possible to describe the ideal level and range of prior experience needed by a co-ordinator of gifted and talented children.

The level of qualifications and degree of specialised training in gifted and talented education held by co-ordinators is cause for concern. The research in gifted education presented in chapter two confirms that in-depth specialised training is essential to ensure that the needs of gifted and talented children are met. Clearly less than 30 hours of in-service activity does not constitute in-depth training. While teachers indicated their need for additional knowledge, there is still a lack of concerted effort in this area. Therefore, future planning will need to address this issue.

The number of schools who have created their own policy on the education of gifted and talented students is also cause for concern. Given that the Department of School Education's policy statement mandates implementation at the school level immediately, the majority of schools still have not responded to this fundamental requirement.

Perhaps schools would have responded more favourably in this regard if there had been more direction and allocation of resources from the Departmental level. For example, Policy Statement Six requires that all teachers should have the opportunity to attend an introductory in-service on gifted and talented education. However, the Statement does not give any indication of the specific details that such an in-service should entail. By contrast the policy specifically mandates the appointment of a qualified co-ordinator by 1995 and many schools have followed this dictate already by identifying a person to undertake this role.

Similarly the provision of support for gifted and talented education may be improved if there were more specific suggestions given as to how to use teacher release time or provide financial assistance.

The variety of learning opportunities ranged from year skipping, acceleration and early entry to compacting the curriculum, mentor programs, peer tutoring, parent helpers and special interest clubs. However, the use of these was sporadic and many were not specifically designed for gifted children. Therefore, it is questionable whether the needs of all children are being met. It may be concluded that additional attention, at the regional level, should be devoted to maximising the range of programs available. This may involve the sharing of resources and personnel, and the implementation of more flexible organisational structures among schools within the clusters.

Although many schools indicated that they had differentiated the curriculum to cater for gifted and talented pupils, there seemed to be a widespread acceptance of provision within the regular classroom. In order for such a model to be effective, a greater number of teachers will need to develop proficiency in meeting the needs of gifted and talented children. Again, this highlights the need for continued efforts in the training of teachers.

Despite realistic perceptions of their roles as co-ordinator, many respondents held an unrealistic perception of their preparedness to undertake the task. For example, most co-ordinators selected several roles from the list of possibilities provided in the survey. At the same

time, there was a general lack of specialist training in education of the gifted and talented.

5.2 Recommendations

It is evident from this survey that several actions are necessary for the successful implementation of the NSW Policy for the Education of Gifted and Talented Students.

1. The Implementation Strategy needs to have support documents in order to detail the specific duties of the classroom teachers and school co-ordinator. These should be produced as a regional initiative supported by the Educational Resource Centres and clusters.

2. There is considerable activity within the gifted and talented area but much of this is misdirected. Many teachers lack confidence in their ability to identify and cater for gifted and talented children in their classrooms. Thus, a recognised educational standard must be developed for all teachers: teacher-training institutions will now need to cater for the training of teachers, at an under-graduate level, in the area of gifted and talented education. It is also vital that a recognised level of basic training be established for the position of co-ordinator and/or teacher of gifted and talented children. The quality of training programs for teachers must be continually monitored in order that a high level of knowledge and skills is maintained and that new research findings are incorporated in the frameworks.

3. As much knowledge is acquired from interaction with fellow teachers and university lecturers, teachers must be encouraged to take part in professional activities in the gifted and talented sphere.

4. On a regional basis, a register of specialist staff needs to be available to allow a ready source of information for classroom teachers.

5. The community should be involved in gifted and talented education projects and teachers encouraged to utilise the community resources.

6. A five-year plan should be developed for gifted and talented education in the region, incorporating Educational Resource Centres, clusters and schools, and paying due regard to the pitfalls of attempting too much too quickly.

7. A follow-up study should be conducted at the end of 1995 to evaluate whether Implementation Strategy Six has been carried out.

In conclusion this survey has indicated that while some efforts are being expended, almost half the primary school pupils who may be gifted are currently overlooked. This reprehensible statistic places gifted children in the realm of those most educationally disadvantaged in the current climate.

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Appendix 1

New South Wales Policy

NSW Department of School Education Policy Statement

Policy statement one
School communities have a responsibility to identify their gifted and talented students.

Policy statement two
School communities have a responsibility to provide a range of opportunities for their gifted and talented students

Policy statement three
Teachers have a responsibility to identify the gifted and talented students in their classes.

Policy statement four
Teachers have a responsibility to select a variety of teaching strategies for inclusion in programs for the range of gifted and talented students in their class.

Policy Statement five
Regions and schools have a responsibility to coordinate school provisions for gifted and talented students when it is feasible for more than one school to share this responsibility.

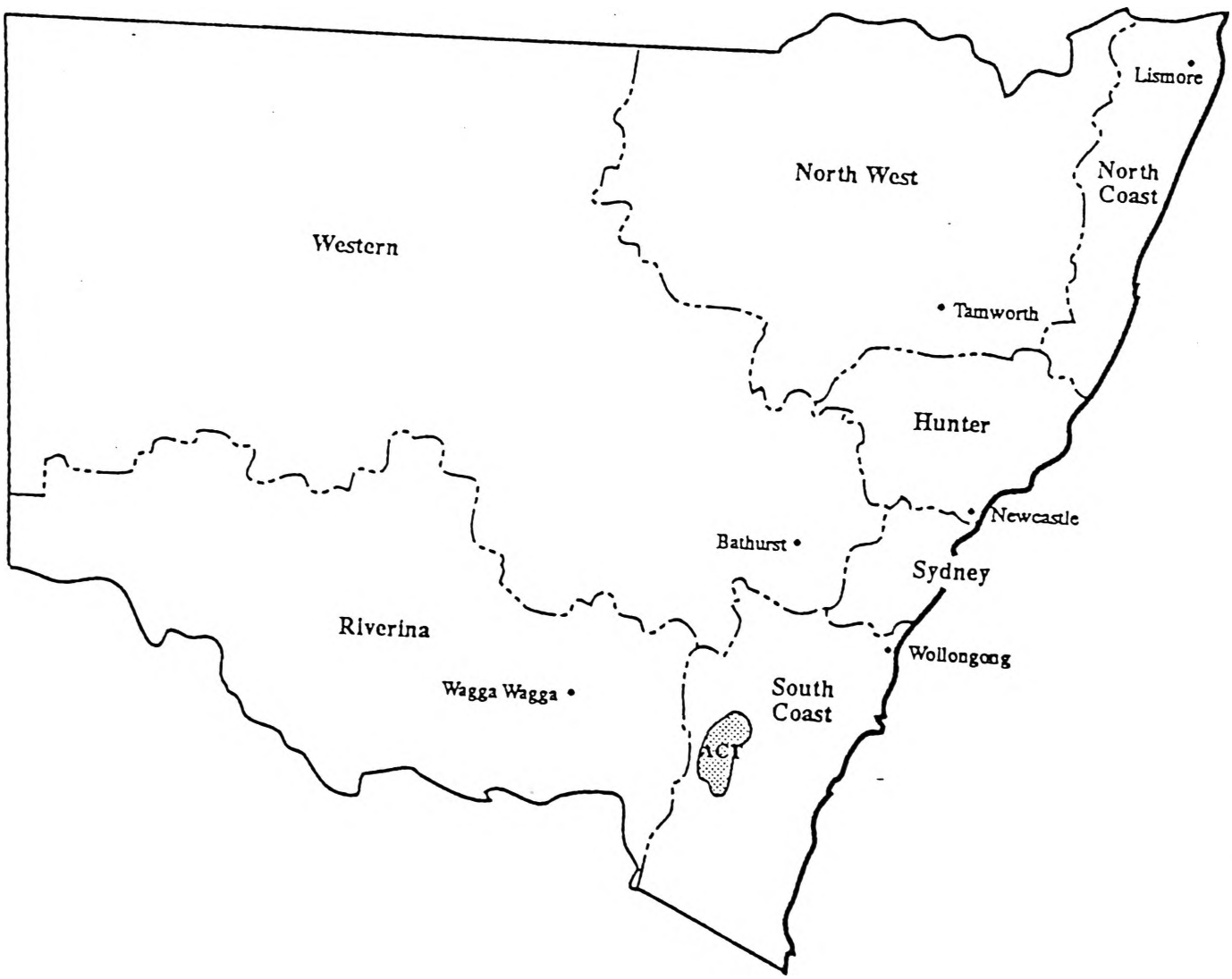
Policy statement six
Regions and schools have a responsibility to provide staff development opportunities in the education of gifted and talented students for principals, teachers and other appropriate personnel.

APPENDIX 1 (continued)

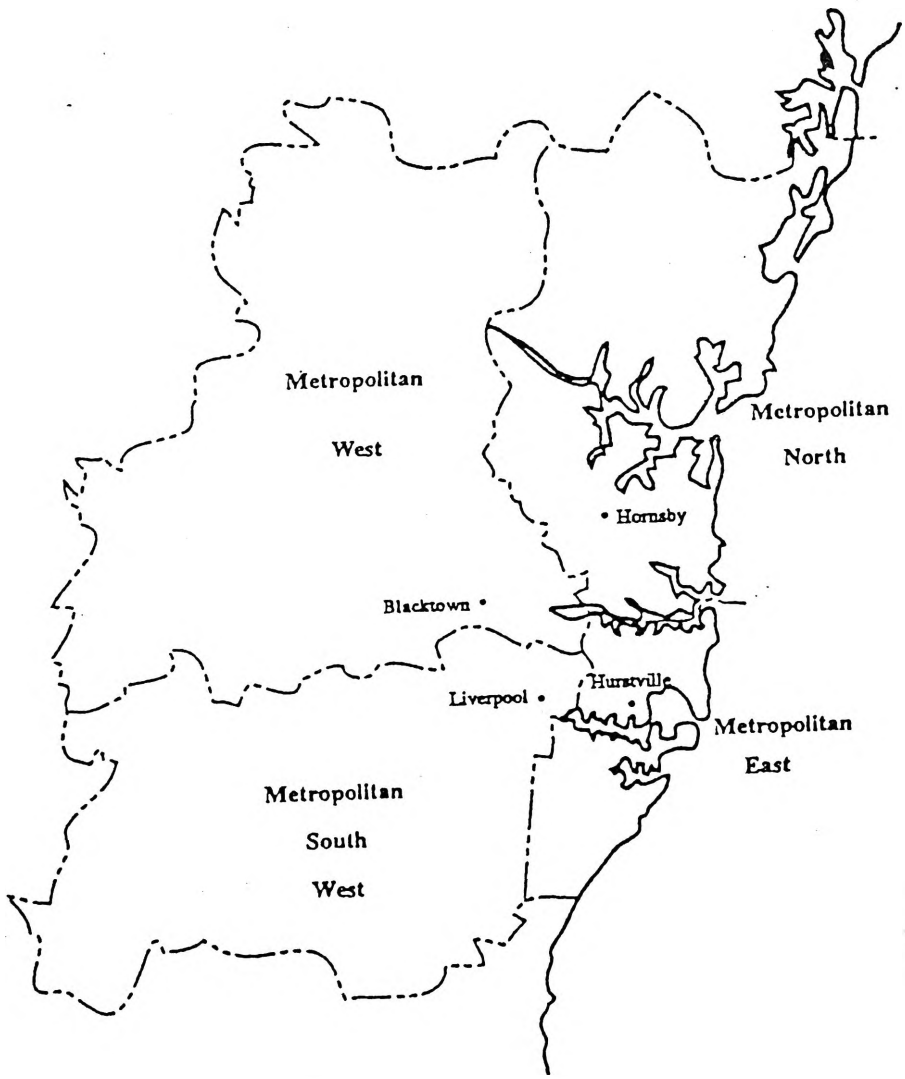
Policy statement seven

The director general and the Central Executive have a responsibility to account for the implementation of Government policy and to report on the outcomes of schooling for gifted and talented students in NSW Government schools.

APPENDIX 2. REGIONS IN NSW (MAP)



APPENDIX 3. REGIONS IN METROPOLITAN SYDNEY (MAP)



APPENDIX 4. LISTS OF SCHOOLS IN THE REGION

Class one schools

Bankstown	Bradbury	Busby West	Cabramatta
Canley Vale	Claymore	Eschol Park	Fairfield West
Governor Philip King	Greenacre	Ingleburn	Leumeah
Macquarie Fields	Prairievale	Robert Townson	Rosemeadow
Ruse	Sackville Street	St Andrews	St Johns Park
Thomas Acres	William Stimson		

Class two schools

Ambervale	Banksia Road	Bass Hill	Blairmount
Bonnyrigg	Bossley Park	Briar Road	Busby
Cabramatta West	Camden	Camden South	Campbellfield
Campbelltown East	Campbelltown North	Canley Heights	Casula
Chester Hill	Condell Park	Curran	Edensor Park
Fairfield Heights	Fairvale	Georges Hall	Glenwood
The Grange	Guise	Hammondville	Harrington Street
Holsworthy	John Warby	King Park	Lansvale
Liverpool	Miller	Mount Pritchard	Narellan
Sarah Redfern	Smithfield	Smithfield West	Villawood
Villawood North	Warragamba	Woodland Road	

APPENDIX 4.(continued)

Class three schools

Ashcroft	Austral	Bargo	Birrong
Campbelltown	Chester Hill North	Chullora	Glenfield
Green Valley	Heckenberg	Liverpool West	Lurnea
Marsden Road	Milperra	Newbridge Heights	Nuwarra
The Oaks	Padstow North	Padstow Park	Panania
Picton	Prestons	Regents Park	Revesby
Sadlier	Tahmoor	Thirlmere	Villawood East
Warwick Farm	Yagoona		

Class four schools

Bankstown North	Bankstown West	Bringelly	Buxton
Cartwright	Chipping Norton	East Hills	Hoxton Park
Ingleburn North	Kemps Creek	Kentlyn	Lansvale East
Leppington	Mawarra	Minto	Mount Pritchard East
Oakdale	Old Guildford	Padstow Heights	Panania North
Picnic Point	Revesby South	Rossmore	Tower Street
Wattawa Heights			

Class five schools

Appin	Badgerys Creek	Bankstown South Infants	Cawdor
Cobbity	Douglas Park	Horsley Park	Kearns
Moorebank	Mount Hunter	Mount Lewis Infants	Sefton Infants
Yanderra	Yennora		

APPENDIX 5. EDUCATIONAL RESOURCE CENTRES WITHIN THE METROPOLITAN SOUTH WEST REGION

Bankstown ERC	Bankstown, Birrong, East Hills
Cartwright ERC	Bossley Park, Busby, Liverpool, Miller
Chester Hill ERC	Canley Park, Fairfield
Glenfield ERC	Glenfield, Leumeah, Macquarie Fields, Raby
Macarthur ERC	Campbelltown, Narellan, Picton, Rosemeadow

APPENDIX 6. CLUSTERS WITHIN THE METROPOLITAN SOUTH WEST REGION

At the time of the survey there were 17 clusters within the Metropolitan South West Region.

Bankstown
Birrong
Bossley Park
Busby
Campbelltown
Canley Park
East Hills
Fairfield
Glenfield
Leumeah
Liverpool
Macquarie Fields
Miller
Narellan
Picton
Raby
Rosemeadow

APPENDIX 7. MINISTERIAL POLICY

NSW Government Strategy for the Education of Gifted and Talented Students

Overall Objectives The overall purpose of the Government Strategy for the Education of Gifted and Talented Students is to maximise the educational outcomes of schooling for gifted and talented students.

Specific Objectives There are three specific objectives of the Strategy for the Education of Gifted and Talented Students which identify areas for improvement in gifted and talented education in NSW schools:

1. to optimise the development of the potential of each gifted and talented student;
2. to promote the development of flexible approach to the education of students with superior abilities;
3. to ensure the provision of opportunities for these students to be involved in a range of learning experiences that will develop a particular talent or a range of talents.

APPENDIX 7 (continued)

Introduction

The Government is committed to providing quality education for all students.

The goals of the Government White Paper on curriculum, **Excellence and Equity**, Incorporate a responsibility to ensure that all children, including gifted and talented children, are given the opportunity to reach their maximum potential.

It is incorrect to assume that all gifted and talented students will be successful at school without appropriate intervention.

The **Carrick Review** states that 'the aim of education is to assist in the development of each child's potential'. It further states that the 'provision for helping children of exceptional ability is not a luxury but a necessity',

The **1990 Education Reform Act**, as part of the Objects of the Act, requires that regard should be paid to:

'assisting each child to achieve his or her potential'

and

'provision of opportunities to children with special abilities'.

From the standpoint of equality of opportunity, education authorities have a responsibility to nurture gifted and talented students.

In view of the potential contribution and benefits to society, the development of the gifts and talents of these students is imperative.

APPENDIX 7 (continued)

Definition

For the purpose of this document the following definition will be adopted:

Gifted students are those with the potential to exhibit superior performance across a wide range of areas of endeavour.

Talented students are those with the potential to exhibit superior performance in one area of endeavour.

It is important to realise that gifted and talented students are not a homogenous group. They do not all exhibit the same traits or characteristics, but rather a wide range of individual differences. No single trait itself constitutes giftedness.

Gifted and talented students often exhibit superior abilities and task commitment, not necessarily in pro-social ways or within the school curriculum. Both gifted and talented students are frequently creative.

Children's gifts and talents become apparent at different stages of their lives. A child may exhibit talents in one area, e.g., art or music, or in a combination of areas.

Gifted and talented children are present in all groups of society, including those requiring remediation in certain subject areas.

Principles

The NSW Government endorses the following principles to guide system and school level action in the education of gifted and talented students:

- Each student has a right to realise his or her potential.

APPENDIX 7 (continued)

- Education in NSW is concerned with the development of the potential of each student.
- Specific provision must be made for gifted and talented students if this aim is to be realised.
- It is the responsibility of education authorities to provide opportunities for students with a wide range of special gifts and talents.
- Education authorities have a responsibility to provide training and professional development opportunities in the education of gifted and talented students for teachers and other appropriate personnel.
- Each school community school recognise its responsibility to provide appropriate educational opportunities for gifted and talented students.
- Each school should devote a proportion of its resources to the provision of challenging and appropriate programs for gifted and talented students in order to provide high quality education for these students.
- Providing for excellence and equity in gifted and talented education will require differential provision, both in individual schools and across local regions.
- Parents should be actively involved in the education of gifted and talented children.

Identification

Early identification of students with gifts and talents is important. It is necessary also to be aware that gifted and talented students are present in disadvantaged and minority populations.

APPENDIX 7 (continued)

Identification procedures should involve parents, teachers and other professional.

The identification process must:

- be dynamic and continuous
- allow for identification at any stage of the child's development
- allow for the highly talented to emerge from the larger talented group
- ensure that identification of student from disadvantaged and minority populations is not overlooked.

A three part procedure is recommended:

- nomination and screening
- placement
- monitoring.

Nomination and screening should be carried out concurrently.

Screening should involve the use of a number of measures of performance and potential. A student should not be required to perform on all measures of performance at a superior level as a number of complicating factors may be present. Measures which may be used, dependent on age and/or the ability being assessed are: standardised tests of creative and general ability, behavioural checklists, anecdotal records, interviews, products and performance, class grades, multi-dimensional testing.

Nomination allows for the nomination of any students by teachers, parents, peers, or where appropriate, by the child him/herself.

Placement refers to the decision to place students in an existing program, or to develop and implement appropriate strategies.

APPENDIX 7 (continued)

Once a child has been identified, careful consideration of appropriate strategies and close consultation between parents, teachers, counsellors and other professionals must occur.

The placement process should be performed by a local area committee if entry is sought to an across school or regional initiative, or, by a school committee if the program is solely school based.

Monitoring: the previous three steps are all designed to identify and select students for the placement in an appropriate program. Monitoring allows for periodical review of the placement or the appropriateness of the program. Placement in a specific program should not be designed to be permanent. The needs of the student may change or the program may need to be adjusted.

Initial and on-going support may be necessary for the parents and classroom teachers of students identified as gifted and talented.

Specific Intervention A number of approaches are available to systems and schools for the education of gifted and talented students. These approaches, in many cases, may be implemented concurrently.

1. **Teaching strategies**

The implementation of appropriate and specific strategies in the regular classroom will form a solid basis for the education of gifted and talented students.

APPENDIX 7 (continued)

2. **Flexible Progression**

Involves the promotion of a child to a level of study beyond that which is usual for his/her age group.

It may take various forms:

- early enrolment
- early completion of a stage and entry in to the next stage in one or more subjects
- early entry to tertiary education.

3. **Vertical Grouping** may involve grouping students by ability across age ranges or stages of development.

4. **Enrichment** is a process of adaptation of the curriculum to enable gifted and talented students to pursue study of a particular topic at greater depth and breadth. Enrichment should form one strand of the total program.

Enrichment involves teaching content beyond the regular curriculum, or, a more in-depth study of a particular topic. This can take place on an individual or group basis and may be conducted by the class teacher, or, by a staff or community member with interest and expertise in the chosen area.

Enrichment may also take the form of the establishment of in-school or across-school interest groups.

These programs must be integrated into the overall education of the child.

5. **Specialist Classes and Specialist School Groupings**

For some gifted and talented students placement in a specialist class or school may be appropriate.

APPENDIX 7 (continued)

i. **Specialist Classes** may incorporate elements of both enrichment and acceleration. Specialist classes should offer opportunities for both full-time and subject or activity specific attendance from within the school and across the local region. This placement should be subject to regular review.

ii. **Specialist Schools:** selective high schools, and to some extent specialist high schools and schools designated as Centres for Excellence, fall into this category.

Centres of Excellence and specialist high schools, whilst catering for the general student population, have the capacity to meet the educational needs of the gifted and talented students.

6. **Mentor Programs**

Mentor Programs match individual students with mentors who have expertise in a specific areas of interest. This may involve regular in-school and after-school meetings or mentoring by distance mode.

7. **Camps for Gifted and Talented Students**

These are camps where courses of study are provided in one or more areas for gifted and talented students. The students are able to pursue knowledge and skills with other students of superior ability.

Gifted and Talented Students Students in Disadvantaged and Minority Groups

Gifted and talented students may be found in all groups in society. They may not, however, conform to outdated and/or subjective perceptions of giftedness.

APPENDIX 7 (continued)

Recent research indicates that gifted and talented students may present as average or well below average in many areas of schooling. Provision will need to be made for these students in overall service delivery.

Portfolio-Wide Initiatives

• A ministerial Advisory Committee will be established comprising of representatives of the following organisations:

NSW Department of School Education
NSW Board of Studies
NSW Association of Independent Schools
Catholic Education Commission of NSW
NSW Teachers Federation
NSW Vice-Chancellors Association
NSW Federation of Parents and Citizens
NSW Gifted and Talented Children's Association
Discretionary Ministerial Appointments (2)

• The Committee will be chaired by an officer of the Ministry of Education, Youth, and Women's Affairs.

• This committee will meet twice per year to monitor and report to the Minister on the implementation of the Strategy.

• The Government will encourage tertiary institutions to establish research projects to conduct research on local programs for, and the local needs of, gifted and talented children.

• The Government will encourage tertiary institutions to provide teacher education programs in Gifted and Talented Education at both under-graduate and graduate level.

APPENDIX 7 (continued)

Board of Studies

The Board of Studies had a role in guiding the curriculum for all students in NSW. The responsibilities of the Board under this strategy are as follows:

- The Board of Studies will develop curriculum implementation guidelines for the education of gifted and talented students from K to 12. These guidelines will form part of the flexible provision for student needs which will be incorporated into all syllabuses. The Board will provide, for each syllabus, a support document which will include suggestions on providing for gifted and talented students.
- The Board of Studies, in co-operation with education authorities, will negotiate arrangement with tertiary institutions for joint involvement with school in relation to the provision of accredited advanced studies for gifted and talented students during their final years of secondary school.
- The Board of Studies will develop guidelines for the School Certificate and Higher School Certificate which will facilitate the flexible progression of gifted and talented students.

Guidelines for Implementation

School Level

- All schools should allocate resources to wither school-based or across-school programs for gifted and talented students.
- All schools should raise awareness among their staff members of the needs of gifted and talented students.

APPENDIX 7 (continued)

- All schools should develop policy, in conjunction with the school community, that implements the Government's Strategy.
- All schools should establish links at local level with other schools (government and non-government), and organisations within the community to enhance the co-operative and collaborative development of appropriate programs for gifted and talented students.
- All school should seek cross-sectorial co-operation and collaboration in the provision of educational opportunities for gifted and talented students.
- Each school should nominate a staff member to act as co-ordinator and liaison person for the school in the local region and to participate in the establishment of a local mentor register.
- All schools should facilitate the participation of all staff members in at least one introductory in-service course addressing the education of gifted and talented students in 1992-93.
- After 1995 all schools, where feasible, should seek to employ at least one teacher who has training in the education of gifted and talented students.

System Level

- Each education authority should begin the implementation of the Government Strategy in 1991.
- Each education authority should ensure that, as a result of this strategy, current policy is reviewed and a policy statement in relation to Gifted and Talented Education is developed, together with comprehensive implementation guidelines.

APPENDIX 7 (continued)

- Each education authority should ensure that opportunities are provided for central, regional, and school staff to participate in professional development activities to support the implementation of this Strategy.

APPENDIX 8. THE QUESTIONNAIRE

SURVEY OF THE ROLE OF THE COORDINATOR FOR GIFTED AND TALENTED AT METROPOLITAN SOUTH WEST REGION PRIMARY SCHOOLS

SCHOOL: _____

ADDRESS: _____

_____ **POSTCODE:** _____

CLUSTER: _____

TELEPHONE: _____ **FAX:** _____

COORDINATOR'S POSITION: _____

Number of pupils: _____ Boys: _____

Number of teaching staff: _____ Girls: _____

Number of classes: _____

ABOUT THE SCHOOL

1. Is the School a member of a Gifted and Talented Association?

   Yes ❑ No ❑

   If yes, which one? _____

2. Has the School participated during the past 2 years in:

   a. Tournament of Minds Yes ❑ No ❑ Don't know ❑

   b. Minds in Motion Yes ❑ No ❑ Don't know ❑

   c. Any other similar undertakings Yes ❑ No ❑ Don't know ❑

   If yes, please give details: _____

   _____

ABOUT THE COORDINATOR

3. Gender: Male ❑ Female ❑

4. Age: 20 — 29 years ❑

   30 — 39 years ❑

   40 — 49 years ❑

   50+ years ❑

APPENDIX 8 (continued)

5. Teaching Experience: *(including full time or part time employment)*

Total: _____ years

At this School: _____ years

6. Highest Formal Qualifications *(refers only to completed qualifications)*

- ❑ Higher degree or equivalent *(eg. M.Ed.; M.A.; M.Sc.; B.Ed. plus Grad.Dip.)*
- ❑ 4 year degree or equivalent *(eg. B.Ed.; Dip.Teach . plus Grad.Dip. etc.)*
- ❑ 3 year diploma or equivalent *(eg. Dip.Teach; 2 year diploma plus conversion to Dip.Teach)*
- ❑ 2 year diploma
- ❑ Other, please state: _____

_____

7. a. Are you currently a member of any professional associations in education *(not including industrial unions)* ?

Yes ❑ No ❑

b. If yes, are any of these associations concerned particularly with education for gifted and talented children?

Yes ❑ No ❑ Don't know ❑

8. Have you done any specific training in the teaching of gifted children?

a. As part of preservice training program, eg. Dip.Teach, B.Ed. etc.

Yes ❑ No ❑

b. As part of a postgraduate qualification, eg. Grad.Dip., M.Ed. etc.

Yes ❑ No ❑

c. As part of an inservice program/activity.

Yes ❑ No ❑

9. Approximately how much time in total have you spent in training programs specifically for the education of gifted and talented children?

- Up to 10 hours ❑
- 11-20 hours ❑
- 21-30 hours ❑
- 31-40 hours ❑
- > 40 hours ❑

10. In what year was your most recent training for education of gifted and talented children? 19_____

APPENDIX 8 (continued)

SCHOOL'S ROLE IN THE EDUCATION OF GIFTED OR TALENTED STUDENTS

11. a. Does your school have a specific policy for the education of gifted and talented students?

Yes ❑ No ❑ Under consideration ❑

b If yes, when was the policy formally adopted? 19_____

12. As current coordinator, have you been personally involved in developing or modifying the school's policy statement?

Yes ❑ No ❑

13. Does the school provide any special support for the education of gifted and talented children through:

a.	Teacher release time	Yes	❑	No	❑
b.	Financial assistance to staff and/or students	Yes	❑	No	❑
c.	A coordinated mentor program	Yes	❑	No	❑

14. Which, if any, of the following resources are provided by the school specifically for the education of gifted and talented children?

Reference books for teachers ❑
Interstate curriculum materials ❑
Student activity books ❑
Computer software ❑
Other student resources *(eg. laboratory materials, kits, reading materials)* ❑

15. a. Are gifted or talented students at your school formally identified?

Yes ❑ No ❑

b. If yes, by what means?

IQ tests ❑
Other standardised tests ❑
Teacher nomination ❑
Parent nomination ❑
Peer nomination ❑

APPENDIX 8 (continued)

16. What special provisions or learning opportunities are made within your School for gifted or talented children?

- Year skipping ❑
- Accelerated progression in particular subjects ❑
- Early entry into kindergarten ❑
- Compacting the curriculum for particular students or groups ❑
- Mentor programs ❑
- Peer tutoring programs ❑
- Parent helpers ❑
- Special interest clubs ❑

17. What special provisions or learning opportunities are made for gifted or talented children by your School, but beyond normal school hours?

- Activity afternoons ❑
- Camps ❑
- Competitions ❑
- Mentor programs ❑

18. In what specific ways are the following aspects of the school program adjusted to accommodate the needs of gifted and talented children?

a. *Curriculum Content*

- Is compacted but not extended ❑
- **OR** extended or made more complex ❑
- **OR** compacted and extended ❑
- Other ❑

Please specify: _____

b. *Teaching Methods*

- Encourage and assess more divergent thinking ❑
- Encourage and assess more deductive reasoning ❑
- Providing activities requiring higher order thinking ❑
- Other ❑

Please specify: _____

APPENDIX 8 (continued)

c. *Development of particular skills:*

- Additional computer time ❑
- Extra tasks for library research ❑
- Individual reading and language program ❑
- Individual maths programs ❑
- Special coaching in sport and athletics ❑
- Opportunities for leadership role ❑
- Creative and practical arts ❑

d. *Learning Environment*

Special assistance provided:

i. in class time ❑

ii. outside school but in class time ❑

iii. outside school and out of class time ❑

Other ❑

Please specify: _____

YOUR ROLE AS GIFTED AND TALENTED COORDINATOR AT YOUR SCHOOL

19. Please indicate which of the following responsibilities you are expected to perform as a coordinator for the education of gifted and talented and which of them you regard as being the most important (limit these to no more than three):

	Expected Roles	*Most Important Roles*
Attend inservice programs on gifted and talented	❑	❑
Give inservice programs on gifted and talented education	❑	❑
Develop methods for identification of the gifted and talented	❑	❑
Plan and implement programs for the gifted and talented	❑	❑
Liaising with parents	❑	❑
Coordinate outside school activities	❑	❑
Be a member of relevant Cluster, ERC Committee	❑	❑

20. a. Do you consider yourself adequately prepared for the role of coordinator?

Yes ❑ No ❑

APPENDIX 8 (continued)

b. If no, please indicate what additional information and skills you require:

. better understanding of identification strategies ❑

. a wider range of problem solving techniques to use with children ❑

. alternative curriculum models ❑

. methods for assessing creativity ❑

. advice on early entry to school ❑

. information on accelerated progression ❑

. developing and implementing mentoring programs ❑

. information on new teaching strategies ❑

APPENDIX 9. LETTER TO THE PRINCIPAL

PO Box 8
Wombarra 2515
20th October, 1992

To the Principal

As part of my graduate study at the University of Wollongong I am undertaking research within the field of gifted and talented education. My project involves a survey of the role of the co-ordinator of gifted and talented education within the Metropolitan South West Region. My application to the Regional Research and Evaluation Committee of the Department of School Education to undertake this research has been approved and I am now seeking your approval for the school to participate, and your help in directing the survey questionnaire to the appropriate member of staff.

The questionnaire is intended to explore various aspects of educational provision for gifted and talented students, and it is addressed to the co-ordinator of gifted and talented education.

I would be grateful if you would help in the project by passing on the attached questionnaire.

Yours faithfully,

APPENDIX 10. LETTER TO THE CO-ORDINATOR

PO Box 8
Wombarra 2515

20th October, 1992

To the Gifted and Talented Co-ordinator

As part of my graduate study at the University of Wollongong I am undertaking research within the field of gifted and talented education.

To assist me in this project would you complete the attached questionnaire relating to your role as the co-ordinator for Gifted and Talented Children in your school. Your response, of course, will be confidential and forms part of a regional wide survey.

I enclose a stamped addressed envelope for the return of your completed questionnaire.

Thankyou for your co-operation in my survey.

Diana Whitton

APPENDIX 11. SURVEY RESPONSES

	school	cluster	ERC	Class	Pupils	Staff	Classes
1	Appin	Rosemeadow	Macarthur	pp3	163	6	6
2	Austral	Busby	Cartwright	pp4	394	18	14
3	Bankstown North	Birrong	Bankstown	pp4	155	10	6
4	Bargo	Picton	Macarthur	pp3	339	17	12
5	Bass Hill	Birrong	Bankstown	pp2	459	22	16
6	Blairmount	Raby	Glenfield	pp2	590	29	22
7	Bonnyrigg	Busby	Cartwright	pp2	616	33	22
8	Bradbury	Campbelltown	Macarthur	pp1	750	29	26
9	Bringelly	Narellan	Macarthur	pp4	205	10	8
10	Busby	Busby	Cartwright	pp3	470	24	19
11	Buxton	Picton	Macarthur	pp4	217	10	8
12	Cabramatta	Canley Park	Chester Hill	pp1	860	50	34
13	Campbellfield	Leumeah	Glenfield	pp2	450	24	18
14	Campbelltown	Campbelltown	Macarthur	pp3	309	10	10
15	Campbelltown East	Campbelltown	Macarthur	pp2	520	21	18
16	Campbelltown North	Campbelltown	Macarthur	pp2	629	27	22
17	Cartwright	Miller	Cartwright	pp4	233	12	9
18	Casula	Glenfield	Glenfield	pp2	518	24	18
19	Chester Hill North	Fairfield	Chester Hill	pp3	435	20	15
20	Chullora	Bankstown	Bankstown	pp3	397	23	15
21	Claymore	Raby	Glenfield	pp1	718	40	29
22	Cobbity	Narellan	Macarthur	pp5	175	7	7
23	Eschol Park	Raby	Glenfield	pp1	825	37	29
24	Fairfield West	Canley Park	Chester Hill	pp1	785	38	2
25	Fairvale	Fairfield	Chester Hill	pp2	584	28	20
26	George's Hall	Birrong	Bankstown	pp2	521	22	18
27	Glenfield	Glenfield	Glenfield	pp3	362	14	13
28	Governor Philip King	Bossley Park	Cartwright	pp1	1004	45	34
29	Green Valley	Busby	Cartwright	pp3	434	20	15
30	Greenacre	Bankstown	Bankstown	pp1	706	29	24
31	Harrington STreet	Busby	Cartwright	pp2	599	34	17
32	Heckenberg	Miller	Cartwright	pp3	368	18	14
33	Horsley Park	Bossley Park	Cartwright	pp5	118	5	5
34	Hoxton Park	Busby	Cartwright	pp4	203	8	8
35	Ingleburn	Macquarie Fields	Glenfield	pp1	710	30	24
36	Kemps Creek	Busby	Cartwright	pp5	176	7	7

APPENDIX 11 (continued)

	school	cluster	ERC	Class	Pupils	Staff	Classes
37	Kentlyn	Leumeah	Glenfield	pp4	278	15	10
38	King Park	Canley Park	Chester Hill	pp2	620	27	21
39	Lansvale	Canley Park	Chester Hill	pp2	526	28	18
40	Liverpool	Liverpool	Cartwright	pp2	635	33	26
41	Liverpool West	Miller	Cartwright	pp3	406	20	15
42	Mawarra	Narellan	Macarthur	pp4	288	16	10
43	Milperra	East Hills	Bankstown	pp3	320	14	1
44	Mount Lewis	Bankstown	Bankstown	pp5	93	4	4
45	Mount Pritchard	Liverpool	Cartwright	pp2	558	28	19
46	Mount Pritchard East	Miller	Cartwright	pp4	270	10	10
47	Narellan	Narellan	Macarthur	pp2	565	24	19
48	Newbridge Heights	Liverpool	Cartwright	pp3	400	18	14
49	Nuwarra	Liverpool	Cartwright	pp3	415	23	19
50	Old Guildford	Fairfield	Chester Hill	pp4	264	16	11
51	Padstow North	East Hills	Bankstown	pp3	264	13	10
52	Padstow Park	East Hills	Bankstown	pp3	440	21	16
53	Picnic Point	East Hills	Bankstown	pp4	265	12	9
54	Picton	Picton	Macarthur	pp3	430	20	17
55	Prairievale	Bossley Park	Cartwright	pp1	790	41	28
56	Revesby	East Hills	Bankstown	pp3	270	9	9
57	Revesby South	East Hills	Bankstown	pp3	264	13	9
58	Robert Townson	Raby	Glenfield	pp1	1060	44	37
59	Ruse	Leumeah	Glenfield	pp1	670	30	23
60	Sackville Street	Macquarie Fields	Glenfield	pp1	849	32	29
61	Sefton INfants	Birrong	Bankstown	pp5	67	3	3
62	Smithfield	Canley Park	Chester Hill	pp2	560	23	23
63	St Andrew	Raby	Glenfield	pp1	1000	39	39
64	The Grange	Leumeah	Glenfield	pp2	490	25	18
65	Thirlmere	Picton	Macarthur	pp3	397	17	14
66	Tower Street	East Hills	Bankstown	pp4	190	10	7
67	Villawood	Fairfield	Chester Hill	pp2	394	24	15
68	Villawood East	Birrong	Bankstown	pp3	336	20	12
69	Villawood North	Fairfield	Chester Hill	pp3	388	23	15
70	Warragamba	Narellan	Macarthur	pp3	440	16	15
71	Wattawa Heights	Bankstown	Bankstown	pp4	255	13	9
72	Woodland	Rosemeadow	Macarthur	pp2	490	16	16

APPENDIX 11 (continued)

	1	2a	2b	2c	Gen...	Age	TEXP	EXP	Qual	7a	7b	8a
1	no	No	No	Yes	M	30 - 39	18	6	4 years	Yes	No	No
2	no	No	No	Yes	F	30 - 39	8	2	4 years	No	No	No
3	no	No	Yes	Yes	F	20 - 29	15	11	4 years	Yes	No	No
4	no	DK	Yes	No	F	30 - 39	7	3	4 years	No	No	No
5	yes	Yes	No	No	F	30 - 39	8	6	3 years	Yes	Yes	No
6	yes	No	No	Yes	F	30 - 39	10	5	3 years	Yes	No	No
7	yes	No	No	Yes	M	40 - 49	4	4	3 years	Yes	No	No
8	no	No	Yes	Yes	M	40 - 49	30	5	3 years	Yes	No	No
9	yes	DK	Yes	Yes	M	30 - 39	14	1	4 years	No	No	Yes
10	no	No	No	No	F	40 - 49	17	1	H deg	Yes	No	No
11	no	Yes	Yes	Yes	F	30 - 39	11	2	4 years	Yes	No	Yes
12	no	Yes	Yes	No	F	40 - 49	17	3	3 years	Yes	No	No
13	no	No	Yes	No	M	30 - 39	13	3	4 years	Yes	Yes	Yes
14	no	No	No	Yes	F	20 - 29	12	3	4 years	Yes	No	No
15	no	No	Yes	Yes	F	40 - 49	20	5	4 years	No	No	No
16	no	Yes	No	Yes	F	50+	30	17	2 years	No	No	No
17	no	No	No	No	F	50+	10	7	3 years	Yes	No	Yes
18	yes	No	Yes	Yes	F	20 - 29	2	2	4 years	Yes	No	Yes
19	no	No	Yes	Yes	F	30 - 39	16	2	4 years	Yes	No	No
20	no	No	No	No	F	30 - 39	8	3	3 years	Yes	Yes	No
21	no	No	No	No	F	40 - 49	26	2	H deg	Yes	No	No
22	yes	No	No	Yes	F	50+	29	1	4 years	No	No	No
23	no	No	No	Yes	F	40 - 49	22	5	2 years	Yes	Yes	No
24	no	Yes	Yes	Yes	M	40 - 49	18	3	H deg	Yes	No	Yes
25	yes	No	Yes	Yes	F	50+	28	2	2 years	Yes	Yes	No
26	yes	No	Yes	Yes	F	20 - 29	5	5	3 years	No	No	No
27	no	Yes	Yes	Yes	F	40 - 49	15	3	4 years	No	No	No
28	yes	Yes	Yes	No	F	20 - 29	5	4	4 years	Yes	No	Yes
29	no	No	No	Yes	F	20 - 29	2	2	3 years	Yes	Yes	Yes
30	no	No	Yes	No	F	50+	37	8	2 years	Yes	Yes	No
31	yes	No	No	Yes	F	20 - 29	6	2	4 years	No	No	No
32	yes	No	Yes	No	F	20 - 29	5	4	2 years	Yes	No	Yes
33	yes	No	Yes	No	F	20 - 29	4	4	H deg	Yes	Yes	Yes
34	yes	No	Yes	Yes	F	20 - 29	5	1	4 years	Yes	Yes	Yes
35	no	No	No	No	M	40 - 49	19	3	H deg	Yes	No	Yes
36	no	No	No	Yes	F	30 - 39	16	3	4 years	No	No	No

APPENDIX 11 (continued)

	1	2a	2b	2c	Gen...	Age	TEXP	EXP	Qual	7a	7b	8a
37	no	No	Yes	DK	M	20 - 29	7	4	4 years	Yes	Yes	Yes
38	no	No	Yes	Yes	M	30 - 39	9	3	4 years	Yes	No	Yes
39	no	DK	Yes	Yes	F	30 - 39	9	6	3 years	No	No	No
40	no	No	Yes	No	F	30 - 39	13	1	H deg	Yes	No	No
41	yes	No	No	No	F	30 - 39	13	12	3 years	No	No	No
42	no	Yes	Yes	Yes	F	30 - 39	8	4	4 years	No	No	No
43	yes	No	Yes	No	F	20 - 29	3	2	4 years	Yes	No	Yes
44	no	No	No	Yes	M	40 - 49	22	4	4 years	No	No	No
45	no	No	No	No	F	40 - 49	22	4	4 years	Yes	No	No
46	no	Yes	Yes	No	F	40 - 49	19	8	2 years	Yes	No	No
47	yes	Yes	Yes	No	M	50+	32	3	4 years	Yes	No	No
48	yes	Yes	No	Yes	F	30 - 39	17	5	4 years	No	No	No
49	yes	No	Yes	Yes	F	40 - 49	21	4	2 years	Yes	No	No
50	no	No	No	No	F	30 - 39	13	6	3 years	No	No	No
51	no	No	Yes	Yes	F	20 - 29	4	3	4 years	No	No	Yes
52	no	No	No	Yes	F	30 - 39	2	2	4 years	No	No	Yes
53	yes	No	Yes	No	F	30 - 39	17	4	4 years	No	No	No
54	yes	No	Yes	Yes	F	20 - 29	3	2	3 years	No	No	Yes
55	no	No	No	Yes	F	20 - 29	6	4	4 years	Yes	No	No
56	no	DK	DK	Yes	F	30 - 39	10	6	3 years	Yes	No	No
57	yes	Yes	DK	No	F	30 - 39	11	7	3 years	No	No	No
58	yes	Yes	Yes	Yes	F	40 - 49	19	8	3 years	Yes	Yes	Yes
59	yes	No	Yes	No	F	40 - 49	30	5	2 years	Yes	No	No
60	no	Yes	Yes	No	F	20 - 29	5	5	4 years	No	No	No
61	no	No	No	Yes	M	20 - 29	6	2	4 years	Yes	Yes	Yes
62	no	No	No	Yes	F	30 - 39	9	1	4 years	No	No	Yes
63	yes	Yes	Yes	No	F	40 - 49	22	7	4 years	Yes	No	Yes
64	yes	Yes	Yes	Yes	F	20 - 29	8	8	3 years	No	No	Yes
65	no	No	Yes	Yes	F	30 - 39	12	2	4 years	Yes	No	No
66	no	No	No	No	F	40 - 49	17	8	4 years	Yes	Yes	No
67	yes	No	Yes	Yes	F	40 - 49	16	12	3 years	No	No	No
68	no	No	Yes	Yes	F	20 - 29	9	2	4 years	Yes	No	No
69	yes	Yes	Yes	No	F	20 - 29	5	2	4 years	Yes	No	No
70	no	No	No	No	M	50+	35	7	H deg	No	No	No
71	no	Yes	Yes	Yes	F	40 - 49	23	7	3 years	Yes	No	No
72	no	No	Yes	Yes	F	20 - 29	8	5	4 years	Yes	No	No

APPENDIX 11 (continued)

	8b	8c	9	10	11	11b	12	13a	13b	13c
1	Yes	Yes	11-20 h	92	UD	0	No	Yes	No	No
2	No	Yes	10 h	92	UD	0	Yes	No	No	No
3	No	Yes	10 h	82	No	0	No	No	No	No
4	No	Yes	31-40 h	92	No	0	No	Yes	Yes	Yes
5	No	Yes	11-20 h	92	Yes	80	No	No	No	No
6	No	Yes	10 h	91	Yes	92	Yes	Yes	No	No
7	No	Yes	>40 h	92	UD	0	Yes	No	Yes	Yes
8	No	Yes	11-20 h	92	Yes	92	Yes	Yes	Yes	No
9	No	Yes	21 - 30 h	91	No	0	No	Yes	No	No
10	No	Yes	10 h	92	No	0	No	No	No	No
11	No	Yes	31-40 h	91	UD	0	Yes	No	Yes	No
12	No	Yes	11-20 h	92	Yes	90	No	No	No	No
13	No	Yes	31-40 h	91	UD	0	Yes	No	No	No
14	No	No	10 h	0	UD	0	No	No	Yes	No
15	No	Yes	10 h	92	UD	0	Yes	No	No	No
16	No	Yes	10 h	92	UD	0	No	Yes	Yes	No
17	No	Yes	11-20 h	92	UD	0	No	No	No	No
18	No	Yes	>40 h	91	Yes	92	Yes	No	No	Yes
19	No	Yes	10 h	91	Yes	92	Yes	No	Yes	No
20	No	Yes	21 - 30 h	91	UD	0	Yes	No	Yes	No
21	Yes	No	11-20 h	82	UD	0	No	No	No	No
22	No	Yes	10 h	92	Yes	92	Yes	Yes	Yes	No
23	No	Yes	11-20 h	92	Yes	90	Yes	Yes	No	No
24	No	Yes	>40 h	90	Yes	91	Yes	No	No	No
25	No	Yes	>40 h	92	UD	0	Yes	Yes	Yes	Yes
26	No	Yes	21 - 30 h	92	UD	93	No	No	No	No
27	No	Yes	10 h	92	UD	0	Yes	No	Yes	No
28	No	Yes	10 h	92	Yes	89	Yes	No	No	No
29	No	Yes	11-20 h	90	UD	0	Yes	No	No	No
30	No	Yes	21 - 30 h	92	Yes	90	Yes	No	No	No
31	Yes	Yes	21 - 30 h	92	UD	0	Yes	No	Yes	No
32	No	No	>40 h	92	UD	0	Yes	No	No	No
33	No	Yes	10 h	92	Yes	92	Yes	No	Yes	No
34	No	Yes	11-20 h	92	UD	0	Yes	No	No	No
35	Yes	Yes	>40 h	91	UD	0	Yes	Yes	Yes	No
36	No	Yes	10 h	91	Yes	90	No	No	Yes	No

APPENDIX 11 (continued)

	8b	8c	9	10	11	11b	12	13a	13b	13c
37	Yes	Yes	>40 h	92	UD	92	Yes	No	Yes	No
38	No	Yes	21 - 30 h	91	UD	0	No	No	No	No
39	No	Yes	21 - 30 h	92	UD	0	No	No	No	No
40	No	Yes	10 h	92	No	0	Yes	No	No	No
41	No	Yes	>40 h	92	Yes	0	Yes	No	Yes	No
42	Yes	Yes	11-20 h	91	Yes	0	Yes	Yes	Yes	No
43	Yes	Yes	21 - 30 h	92	Yes	92	Yes	Yes	Yes	No
44	No	Yes	31-40 h	92	UD	0	No	No	No	No
45	No	Yes	31-40 h	92	UD	88	No	No	No	No
46	No	Yes	11-20 h	92	UD	0	No	No	Yes	No
47	No	Yes	11-20 h	92	No	0	Yes	Yes	Yes	No
48	No	Yes	>40 h	92	Yes	86	Yes	No	Yes	No
49	No	Yes	11-20 h	92	UD	91	Yes	No	No	No
50	No	Yes	11-20 h	92	UD	92	Yes	No	Yes	No
51	No	Yes	11-20 h	92	No	91	Yes	No	No	No
52	No	Yes	11-20 h	91	Yes	0	Yes	No	Yes	No
53	No	Yes	11-20 h	92	UD	91	Yes	No	No	No
54	No	Yes	>40 h	92	UD	0	Yes	No	No	No
55	No	Yes	11-20 h	92	UD	90	Yes	No	No	No
56	No	Yes	10 h	92	Yes	92	Yes	No	No	Yes
57	No	Yes	11-20 h	91	UD	91	Yes	No	No	No
58	No	Yes	11-20 h	92	Yes	93	Yes	No	Yes	No
59	No	Yes	21 - 30 h	92	UD	0	Yes	Yes	No	No
60	No	No	10 h	92	Yes	0	Yes	No	Yes	No
61	No	Yes	21 - 30 h	92	No	0	No	No	No	No
62	No	Yes	>40 h	92	UD	92	Yes	Yes	No	No
63	No	Yes	>40 h	92	Yes	90	Yes	Yes	No	Yes
64	No	Yes	>40 h	92	Yes	88	Yes	No	No	No
65	No	Yes	10 h	92	Yes	0	Yes	No	No	No
66	No	Yes	11-20 h	92	Yes	0	No	No	No	Yes
67	No	Yes	11-20 h	92	UD	0	Yes	Yes	Yes	No
68	Yes	Yes	>40 h	92	Yes	0	No	Yes	Yes	No
69	No	Yes	11-20 h	92	No	90	Yes	No	Yes	No
70	Yes	Yes	>40 h	92	Yes	0	Yes	Yes	Yes	No
71	No	Yes	21 - 30 h	92	Yes	0	No	No	No	No
72	No	Yes	11-20 h	92	Yes	0	No	No	No	No

APPENDIX 11 (continued)

	14.1	14.2	14.3	14.4	14.5	15a	15b-1	15b-2	15b-3
1	Yes	No	No	No	No	Yes	Yes	No	Yes
2	Yes	No	No	No	No	Yes	Yes	Yes	Yes
3	Yes	No	No	Yes	Yes	Yes	Yes	No	Yes
4	No	No	No	No	No	Yes	Yes	Yes	Yes
5	Yes	No	No	Yes	No	No	No	Yes	Yes
6	Yes	No	No	Yes	Yes	No	No	No	Yes
7	Yes	Yes	Yes	Yes	No	Yes	No	No	Yes
8	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
9	Yes	No	No	Yes	No	Yes	No	No	Yes
10	No	No	No	Yes	Yes	Yes	Yes	No	Yes
11	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes
12	Yes	No	No	No	No	No	No	No	No
13	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes
14	No	Yes	No	Yes	No	Yes	No	Yes	Yes
15	Yes	No	No	No	Yes	Yes	No	No	Yes
16	Yes	No	No	Yes	Yes	Yes	Yes	No	Yes
17	No	No	No	Yes	Yes	No	No	No	No
18	Yes	No	No	No	Yes	Yes	Yes	No	Yes
19	Yes	No	No	No	No	Yes	No	No	Yes
20	No	No	No	No	No	Yes	Yes	No	Yes
21	No	No	No	No	No	Yes	Yes	Yes	Yes
22	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes
23	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes
24	Yes	No	Yes	Yes	No	Yes	Yes	No	Yes
25	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
26	Yes	No	No	Yes	No	Yes	No	Yes	Yes
27	Yes	No	Yes	Yes	No	No	No	No	No
28	Yes	No	No	Yes	Yes	Yes	Yes	No	Yes
29	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
30	Yes	Yes	No	No	No	Yes	Yes	No	Yes
31	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes
32	Yes	No	Yes	Yes	No	Yes	Yes	Yes	Yes
33	Yes	No	No	No	No	Yes	Yes	No	Yes
34	Yes	No	No	No	No	Yes	No	No	Yes
35	Yes	Yes	No	No	Yes	Yes	Yes	No	Yes
36	Yes	No	No	Yes	No	Yes	Yes	No	Yes

APPENDIX 11 (continued)

	14.1	14.2	14.3	14.4	14.5	15a	15b-1	15b-2	15b-3
37	Yes	No	No	Yes	No	Yes	Yes	Yes	Yes
38	Yes	Yes	No	No	No	No	No	No	Yes
39	No	No	No	No	No	No	No	No	No
40	Yes	No	No	No	Yes	Yes	No	Yes	Yes
41	No	No	No	Yes	No	Yes	Yes	No	Yes
42	Yes	No	No	Yes	No	Yes	No	No	Yes
43	Yes	No	Yes	Yes	Yes	Yes	Yes	No	Yes
44	Yes	No	No	Yes	No	Yes	No	No	Yes
45	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes
46	Yes	No	No	Yes	Yes	Yes	No	Yes	Yes
47	Yes	No	No	No	Yes	Yes	No	No	Yes
48	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes
49	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
50	No	No	No	No	No	Yes	Yes	No	Yes
51	Yes	No	No	No	Yes	Yes	Yes	No	Yes
52	Yes	No	No	No	No	Yes	Yes	No	Yes
53	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes
54	Yes	Yes	No	No	Yes	Yes	Yes	No	Yes
55	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes
56	Yes	Yes	No	Yes	No	Yes	Yes	Yes	Yes
57	Yes	No	No	No	Yes	Yes	Yes	No	Yes
58	Yes	No	No	Yes	Yes	No	No	No	No
59	Yes	No	No	Yes	Yes	Yes	No	Yes	Yes
60	Yes	Yes	No	Yes	Yes	Yes	No	Yes	Yes
61	Yes	No	No	Yes	Yes	Yes	Yes	No	Yes
62	Yes	No	No	Yes	No	Yes	Yes	No	Yes
63	Yes	No	No	Yes	Yes	Yes	No	No	Yes
64	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
65	No	No	No	Yes	No	Yes	Yes	Yes	Yes
66	No	No	Yes	Yes	No	Yes	No	Yes	Yes
67	Yes	Yes	No	Yes	No	Yes	No	No	Yes
68	Yes	No	No	No	No	Yes	No	No	Yes
69	Yes	No	No	Yes	Yes	No	No	No	No
70	No	No	No	Yes	No	Yes	No	No	Yes
71	Yes	No	Yes	Yes	No	Yes	Yes	No	Yes
72	No	No	No	No	No	Yes	Yes	No	No

APPENDIX 11 (continued)

	15b-4	15b-5	16.1	16.2	16.3	16.4	16.5	16.6	16.7	16.8	16 TOTAL
1	No	No	No	No	No	Yes	Yes	No	No	No	2
2	Yes	No	No	Yes	No	No	No	No	No	No	1
3	No	No	No	No	No	No	No	No	No	No	0
4	Yes	Yes	No	Yes	No	Yes	No	No	No	No	2
5	No	No	No	No	No	No	No	Yes	Yes	Yes	3
6	Yes	No	No	Yes	No	Yes	No	Yes	No	Yes	4
7	Yes	Yes	No	Yes	Yes	No	Yes	Yes	No	Yes	5
8	Yes	No	No	Yes	No	No	No	Yes	Yes	Yes	4
9	No	No	Yes	No	Yes	No	No	Yes	Yes	No	4
10	Yes	Yes	No	Yes	No	No	No	Yes	No	No	2
11	Yes	Yes	No	No	No	No	No	Yes	Yes	Yes	3
12	No	No	No	No	No	No	No	No	No	Yes	1
13	Yes	No	No	Yes	Yes	No	No	Yes	No	Yes	4
14	No	No	No	No	No	No	No	Yes	Yes	No	2
15	Yes	No	Yes	No	No	No	No	Yes	No	Yes	3
16	Yes	No	Yes	No	Yes	Yes	No	Yes	Yes	No	5
17	No	No	No	No	No	Yes	No	Yes	No	No	2
18	Yes	Yes	No	Yes	No	Yes	Yes	No	No	No	3
19	Yes	No	No	No	No	No	No	No	No	No	0
20	Yes	No	No	No	No	No	No	No	No	Yes	1
21	Yes	No	Yes	Yes	Yes	No	No	No	No	No	3
22	Yes	No	No	No	No	No	No	Yes	Yes	Yes	3
23	Yes	Yes	No	Yes	Yes	No	No	Yes	Yes	No	4
24	Yes	No	Yes	No	Yes	No	No	No	No	Yes	3
25	Yes	Yes	No	No	No	No	Yes	Yes	Yes	Yes	4
26	Yes	No	No	Yes	No	No	No	No	No	Yes	2
27	No	No	Yes	No	No	Yes	No	No	No	No	2
28	Yes	No	No	No	No	No	No	Yes	Yes	No	2
29	Yes	Yes	No	No	Yes	No	No	Yes	Yes	Yes	4
30	Yes	No	No	No	No	No	No	No	No	No	0
31	Yes	No	No	Yes	No	Yes	Yes	No	No	Yes	4
32	Yes	No	No	Yes	No	Yes	No	No	No	No	2
33	Yes	No	Yes	No	No	No	No	No	No	Yes	2
34	No	No	No	No	No	No	No	No	No	No	0
35	Yes	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes	6
36	No	No	No	Yes	No	No	No	Yes	Yes	No	3

APPENDIX 11 (continued)

	15b-4	15b-5	16.1	16.2	16.3	16.4	16.5	16.6	16.7	16.8	16 TOTAL
37	Yes	No	No	Yes	No	No	No	Yes	Yes	Yes	4
38	No	No	No	No	No	No	No	Yes	Yes	Yes	3
39	No	No	Yes	No	No	No	No	No	No	Yes	2
40	Yes	Yes	No	No	No	No	No	No	No	No	0
41	Yes	No	No	No	No	No	No	No	No	Yes	1
42	Yes	Yes	Yes	No	No	No	No	No	Yes	No	2
43	Yes	Yes	No	No	No	Yes	No	No	No	No	1
44	No	No	No	No	No	No	No	No	Yes	No	1
45	Yes	No	No	No	No	Yes	No	Yes	No	Yes	3
46	Yes	No	No	Yes	No	No	No	No	Yes	Yes	3
47	Yes	Yes	Yes	No	Yes	No	No	No	No	No	2
48	Yes	No	Yes	Yes	No	Yes	No	Yes	Yes	Yes	6
49	Yes	No	Yes	Yes	Yes	No	No	No	Yes	Yes	5
50	Yes	Yes	No	No	Yes	No	Yes	No	Yes	Yes	4
51	Yes	Yes	No	No	No	No	No	Yes	Yes	Yes	3
52	Yes	No	No	No	No	No	No	No	No	No	0
53	Yes	No	No	Yes	Yes	Yes	No	No	Yes	Yes	5
54	Yes	No	No	No	No	No	No	No	No	Yes	1
55	Yes	No	No	No	No	No	No	Yes	Yes	No	2
56	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	7
57	Yes	No	No	No	No	Yes	No	Yes	Yes	Yes	4
58	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	8
59	Yes	No	No	Yes	No	No	No	Yes	Yes	No	3
60	Yes	No	No	No	No	No	No	Yes	Yes	Yes	3
61	Yes	No	No	Yes	No	No	No	No	Yes	No	2
62	Yes	No	Yes	Yes	Yes	No	No	No	Yes	Yes	5
63	No	No	No	No	No	Yes	Yes	No	No	No	2
64	Yes	Yes	No	No	No	No	No	No	No	No	0
65	Yes	No	No	No	No	No	No	Yes	Yes	Yes	3
66	No	No	No	Yes	No	No	No	Yes	Yes	No	3
67	Yes	No	No	No	No	No	No	No	No	No	0
68	Yes	Yes	No	Yes	No	No	No	No	No	No	1
69	No	No	No	No	No	No	No	No	No	Yes	1
70	Yes	Yes	No	No	Yes	No	No	No	No	Yes	2
71	Yes	No	No	No	Yes	No	Yes	Yes	Yes	No	4
72	No	No	No	No	Yes	No	No	No	No	No	1

APPENDIX 11 (continued)

	17act	17camps	17comp	17men	18a	18b	18 b - 2	18b - 3
1	Yes	Yes	No	No	A	No	No	Yes
2	No	No	Yes	No	B	No	No	No
3	Yes	No	No	No	B	Yes	Yes	Yes
4	Yes	No	Yes	No	C	Yes	Yes	Yes
5	No	Yes	Yes	No	B	Yes	Yes	Yes
6	No	No	No	No	B	Yes	Yes	Yes
7	Yes	Yes	No	Yes	B	Yes	No	Yes
8	Yes	Yes	Yes	No	C	Yes	Yes	Yes
9	Yes	Yes	No	No	A	No	Yes	No
10	No	No	No	No	B	Yes	Yes	Yes
11	Yes	Yes	Yes	No	B	Yes	No	Yes
12	Yes	No	Yes	No	•	No	No	No
13	Yes	No	No	No	C	Yes	No	Yes
14	No	Yes	No	No	B	Yes	No	Yes
15	No	No	No	No	B	No	No	No
16	No	Yes	Yes	No	C	Yes	Yes	Yes
17	No	Yes	Yes	No	C	Yes	Yes	Yes
18	No	No	No	No	C	Yes	Yes	Yes
19	No	No	No	No	B	No	No	Yes
20	Yes	No	No	No	•	Yes	Yes	Yes
21	No	No	Yes	No	•	Yes	Yes	Yes
22	No	No	Yes	No	C	Yes	Yes	Yes
23	No	No	No	No	C	Yes	Yes	No
24	Yes	No	Yes	No	B	Yes	No	No
25	Yes	Yes	Yes	Yes	B	Yes	Yes	Yes
26	No	No	Yes.	No	C	No	No	Yes
27	No	No	Yes	No	C	Yes	Yes	No
28	No	No	Yes	No	B	Yes	Yes	Yes
29	No	No	No	No	B	Yes	Yes	No
30	No	No	No	No	•	Yes	Yes	No
31	No	Yes	Yes	No	C	Yes	Yes	Yes
32	Yes	No	Yes	No	C	Yes	Yes	Yes
33	Yes	No	Yes	No	B	No	No	Yes
34	No	No	Yes	No	B	No	No	Yes
35	No	No	Yes	No	B	No	No	No
36	No	No	Yes	No	B	Yes	Yes	Yes

APPENDIX 11 (continued)

	17act	17camps	17comp	17men	18a	18b	18 b - 2	18b - 3
37	Yes	No	Yes	No	B	Yes	Yes	Yes
38	No	No	No	No	•	No	No	No
39	No	No	Yes	No	A	No	No	No
40	Yes	No	Yes	No	B	Yes	Yes	Yes
41	No	No	Yes	No	B	No	No	Yes
42	No	No	Yes	No	•	No	No	Yes
43	Yes	Yes	Yes	No	C	Yes	Yes	Yes
44	No	No	No	No	•	Yes	No	Yes
45	No	No	Yes	Yes	C	Yes	Yes	Yes
46	No	No	Yes	No	•	Yes	No	Yes
47	Yes	No	No	No	B	Yes	Yes	Yes
48	No	No	Yes	No	C	Yes	Yes	Yes
49	Yes	Yes	Yes	No	B	Yes	No	Yes
50	No	Yes	No	No	B	Yes	Yes	Yes
51	No	Yes	Yes	No	C	Yes	Yes	Yes
52	No	No	No	No	B	Yes	Yes	Yes
53	Yes	No	Yes	No	B	Yes	Yes	Yes
54	Yes	No	No	No	•	Yes	No	Yes
55	No	No	No	No	B	Yes	Yes	Yes
56	No	No	Yes	No	B	Yes	Yes	Yes
57	No	Yes	No	No	C	Yes	No	No
58	No	No	Yes	Yes	C	Yes	Yes	Yes
59	Yes	No	Yes	No	B	No	No	Yes
60	Yes	Yes	Yes	No	B	Yes	Yes	Yes
61	No	No	No	No	A	Yes	No	No
62	Yes	No	No	No	B	No	No	No
63	No	No	No	No	C	Yes	Yes	Yes
64	No	No	No	No	B	Yes	No	Yes
65	Yes	Yes	Yes	No	B	No	No	Yes
66	No	No	Yes	No	B	No	Yes	Yes
67	No	No	No	No	B	Yes	Yes	Yes
68	No	Yes	No	No	•	No	Yes	Yes
69	No	No	Yes	No	•	Yes	No	Yes
70	No	No	No	No	B	Yes	Yes	Yes
71	No	No	Yes	No	B	Yes	Yes	Yes
72	No	No	Yes	No	•	No	No	No

APPENDIX 11 (continued)

	18 c - 1	18c - 2	18 c- 3	18 c - 4	18 c - 5	18 c - 6	18 c - 7	18 total	18 d
1	No	No	Yes	No	No	Yes	No	2	Yes
2	Yes	Yes	No	No	No	No	No	2	Yes
3	Yes	Yes	No	No	No	Yes	No	3	Yes
4	No	Yes	No	No	No	No	No	1	No
5	Yes	Yes	Yes	Yes	Yes	Yes	Yes	7	No
6	Yes	Yes	No	Yes	No	Yes	Yes	5	Yes
7	Yes	Yes	Yes	Yes	Yes	Yes	Yes	7	Yes
8	Yes	Yes	Yes	No	Yes	Yes	No	5	Yes
9	Yes	Yes	No	Yes	Yes	No	No	4	Yes
10	Yes	Yes	No	No	No	Yes	No	3	Yes
11	Yes	Yes	Yes	Yes	Yes	Yes	Yes	7	Yes
12	No	No	No	No	Yes	No	Yes	2	Yes
13	Yes	No	No	Yes	No	Yes	No	3	Yes
14	Yes	Yes	No	No	No	Yes	No	3	No
15	No	Yes	Yes	No	Yes	Yes	Yes	5	No
16	Yes	Yes	No	No	No	Yes	Yes	4	Yes
17	Yes	Yes	Yes	Yes	Yes	Yes	Yes	7	Yes
18	No	No	No	No	No	Yes	Yes	2	Yes
19	No	No	No	No	No	No	No	0	Yes
20	No	Yes	No	No	No	No	Yes	2	No
21	No	No	No	No	No	Yes	Yes	2	No
22	No	Yes	Yes	Yes	No	Yes	Yes	5	Yes
23	Yes	Yes	Yes	Yes	Yes	Yes	Yes	7	Yes
24	No	No	No	No	Yes	Yes	No	2	Yes
25	Yes	Yes	Yes	Yes	Yes	Yes	Yes	7	Yes
26	Yes	No	No	No	No	Yes	No	2	No
27	Yes	Yes	No	Yes	Yes	Yes	No	5	Yes
28	Yes	No	No	Yes	No	No	No	2	Yes
29	No	No	Yes	Yes	No	Yes	Yes	4	Yes
30	No	No	No	No	No	Yes	No	1	Yes
31	No	No	Yes	Yes	No	Yes	Yes	4	Yes
32	No	Yes	Yes	Yes	Yes	Yes	No	5	Yes
33	No	Yes	Yes	No	No	Yes	No	3	Yes
34	No	No	Yes	No	No	Yes	Yes	3	Yes
35	No	No	No	No	No	No	No	0	Yes
36	Yes	Yes	Yes	Yes	Yes	Yes	No	6	Yes

APPENDIX 11 (continued)

	18 c - 1	18c - 2	18 c- 3	18 c - 4	18 c - 5	18 c - 6	18 c - 7	18 total	18 d
37	Yes	Yes	Yes	Yes	Yes	Yes	Yes	7	Yes
38	No	No	Yes	Yes	Yes	Yes	Yes	5	Yes
39	No	No	No	No	No	Yes	Yes	2	No
40	No	Yes	No	No	No	No	No	1	Yes
41	Yes	No	No	No	Yes	Yes	No	3	No
42	Yes	Yes	No	No	No	Yes	Yes	4	Yes
43	Yes	Yes	Yes	Yes	Yes	Yes	Yes	7	Yes
44	No	No	No	No	No	No	No	0	Yes
45	No	Yes	Yes	Yes	Yes	Yes	Yes	6	Yes
46	No	No	No	No	No	Yes	Yes	2	Yes
47	Yes	Yes	Yes	Yes	No	Yes	Yes	6	Yes
48	Yes	Yes	Yes	Yes	Yes	Yes	Yes	7	Yes
49	No	Yes	Yes	No	No	Yes	Yes	4	Yes
50	Yes	Yes	No	No	No	Yes	Yes	4	Yes
51	Yes	Yes	Yes	Yes	Yes	Yes	No	6	Yes
52	Yes	No	No	No	Yes	No	No	2	No
53	Yes	Yes	Yes	No	No	Yes	No	4	Yes
54	No	Yes	Yes	Yes	No	No	No	3	Yes
55	Yes	Yes	Yes	Yes	No	No	Yes	5	Yes
56	Yes	Yes	Yes	Yes	Yes	Yes	Yes	7	Yes
57	Yes	Yes	Yes	No	Yes	Yes	No	5	Yes
58	Yes	Yes	Yes	Yes	Yes	Yes	Yes	7	Yes
59	No	Yes	No	No	Yes	Yes	Yes	4	Yes
60	No	Yes	Yes	No	No	Yes	No	3	Yes
61	No	No	Yes	Yes	No	No	No	2	Yes
62	No	Yes	No	No	No	No	Yes	2	Yes
63	No	Yes	Yes	Yes	No	Yes	Yes	5	Yes
64	No	No	No	No	No	No	No	0	Yes
65	No	Yes	No	Yes	No	Yes	Yes	4	No
66	No	Yes	Yes	Yes	No	Yes	No	4	Yes
67	Yes	Yes	Yes	No	Yes	Yes	Yes	6	Yes
68	No	Yes	Yes	Yes	No	No	No	3	Yes
69	Yes	No	No	No	Yes	Yes	Yes	4	No
70	Yes	Yes	No	No	Yes	Yes	Yes	5	Yes
71	Yes	Yes	No	No	Yes	Yes	No	4	Yes
72	No	No	No	No	No	No	No	0	No

APPENDIX 11 (continued)

	18 d - 2	18d - 3	19 - 1	19 - 2	19 - 3	19 - 4	19 - 5
1	No	No	No	No	No	No	No
2	No	No	Yes	No	Yes	Yes	No
3	Yes	Yes	Yes	No	No	Yes	No
4	No	No	Yes	No	No	No	No
5	No	No	Yes	Yes	Yes	No	No
6	Yes	No	No	No	No	Yes	Yes
7	No	Yes	No	No	No	No	No
8	Yes	No	No	No	Yes	Yes	Yes
9	No	No	No	No	No	Yes	No
10	No	No	Yes	Yes	Yes	No	Yes
11	No	Yes	Yes	Yes	Yes	No	Yes
12	No	No	Yes	No	Yes	Yes	No
13	Yes	Yes	Yes	Yes	Yes	Yes	Yes
14	Yes	No	Yes	No	No	Yes	No
15	No	Yes	Yes	Yes	Yes	Yes	Yes
16	No	Yes	Yes	No	No	No	Yes
17	No	No	Yes	No	No	No	No
18	No	No	Yes	Yes	Yes	Yes	No
19	No	No	No	Yes	Yes	Yes	Yes
20	Yes	Yes	Yes	Yes	Yes	Yes	Yes
21	Yes	No	Yes	No	Yes	Yes	Yes
22	No	No	Yes	No	Yes	No	No
23	No	No	Yes	No	Yes	Yes	No
24	No	No	Yes	No	No	No	No
25	Yes	Yes	No	Yes	No	Yes	No
26	Yes	No	Yes	Yes	No	Yes	No
27	No	Yes	No	Yes	Yes	Yes	Yes
28	No	No	Yes	Yes	Yes	Yes	Yes
29	No	No	Yes	Yes	No	No	No
30	No	No	Yes	No	Yes	No	Yes
31	Yes	Yes	Yes	Yes	Yes	Yes	Yes
32	No	Yes	Yes	No	No	No	No
33	No	No	No	No	No	Yes	No
34	Yes	Yes	Yes	Yes	Yes	Yes	Yes
35	No	No	Yes	No	No	Yes	Yes
36	No	No	Yes	No	No	Yes	No

APPENDIX 11 (continued)

	18 d - 2	18d - 3	19 - 1	19 - 2	19 - 3	19 - 4	19 - 5
37	Yes	Yes	No	Yes	No	Yes	Yes
38	No	No	Yes	Yes	Yes	Yes	Yes
39	No	No	Yes	No	Yes	Yes	No
40	No	No	No	No	No	No	No
41	No	Yes	Yes	No	No	Yes	No
42	No	No	No	No	Yes	Yes	No
43	Yes	Yes	Yes	Yes	Yes	Yes	Yes
44	No	No	Yes	Yes	No	Yes	No
45	No	No	Yes	Yes	No	Yes	Yes
46	No	Yes	Yes	No	Yes	No	No
47	No	No	Yes	No	No	No	Yes
48	No	No	Yes	Yes	Yes	Yes	Yes
49	Yes	Yes	No	Yes	Yes	Yes	No
50	No	No	Yes	Yes	Yes	Yes	Yes
51	Yes	Yes	Yes	Yes	Yes	Yes	Yes
52	No	No	Yes	Yes	No	No	No
53	Yes	No	No	No	No	Yes	Yes
54	No	No	Yes	Yes	Yes	Yes	Yes
55	No	No	Yes	Yes	Yes	Yes	Yes
56	Yes	No	Yes	Yes	Yes	Yes	Yes
57	No	No	No	No	No	No	No
58	Yes	Yes	No	Yes	No	Yes	No
59	Yes	Yes	Yes	Yes	Yes	Yes	Yes
60	No	No	Yes	Yes	Yes	Yes	Yes
61	No	No	Yes	Yes	Yes	Yes	Yes
62	Yes	Yes	Yes	Yes	Yes	Yes	Yes
63	No	No	Yes	Yes	Yes	No	No
64	No	No	No	Yes	No	No	Yes
65	No	No	Yes	Yes	Yes	Yes	Yes
66	No	No	Yes	No	Yes	No	Yes
67	Yes	Yes	Yes	Yes	Yes	Yes	Yes
68	No	No	Yes	No	Yes	Yes	No
69	No	Yes	Yes	Yes	Yes	No	No
70	No	No	Yes	Yes	Yes	No	No
71	No	No	Yes	Yes	Yes	No	No
72	No	No	No	No	No	No	No

APPENDIX 11 (continued)

	19 - 6	19 - 7	19a - 1	19b-2	19b-3	19b-4	19b-5	19b-6
1	No	No	No	No	No	No	No	No
2	No	Yes	Yes	No	No	Yes	No	No
3	No	No	No	No	Yes	No	No	No
4	Yes	No	No	No	No	No	No	No
5	No	No	Yes	Yes	No	Yes	No	No
6	No	Yes	No	No	No	Yes	Yes	No
7	No	No	No	Yes	No	Yes	No	Yes
8	No	No	No	No	No	No	No	No
9	Yes	Yes	Yes	Yes	Yes	No	Yes	No
10	No	Yes	No	No	Yes	No	Yes	No
11	No	No	No	Yes	No	Yes	Yes	No
12	No	No	Yes	No	Yes	Yes	No	No
13	Yes	Yes	No	No	Yes	Yes	Yes	No
14	No	No	No	No	No	No	No	No
15	No	No	Yes	Yes	No	Yes	No	No
16	Yes	No	No	No	No	No	No	Yes
17	No	Yes	No	No	No	No	No	No
18	No	No	No	Yes	Yes	Yes	No	No
19	No	No	Yes	No	No	No	No	No
20	Yes	No	Yes	Yes	Yes	No	No	No
21	No	Yes	No	No	Yes	Yes	No	No
22	Yes	Yes	No	No	No	No	No	No
23	No	No	Yes	No	Yes	Yes	No	No
24	No	Yes	No	No	No	Yes	No	No
25	No	Yes	Yes	No	No	Yes	No	No
26	No	Yes	No	No	No	Yes	No	No
27	No	Yes	No	No	Yes	Yes	No	No
28	Yes	Yes	No	Yes	Yes	Yes	No	No
29	No	Yes	No	No	No	No	No	No
30	Yes	Yes	Yes	No	No	No	No	Yes
31	No	Yes	No	Yes	Yes	Yes	No	No
32	Yes	Yes	No	Yes	Yes	Yes	Yes	No
33	No	No	Yes	No	No	No	No	No
34	Yes	No	No	Yes	Yes	Yes	No	No
35	No	No	No	Yes	No	Yes	No	Yes
36	Yes	No	No	Yes	No	Yes	Yes	No

APPENDIX 11 (continued)

	19 - 6	19 - 7	19a - 1	19b-2	19b-3	19b-4	19b-5	19b-6
37	No	No	Yes	No	Yes	No	No	No
38	Yes	Yes	No	Yes	Yes	Yes	No	No
39	No	Yes	No	No	No	Yes	No	No
40	No	No	No	No	Yes	Yes	No	Yes
41	Yes	Yes	Yes	No	No	Yes	Yes	No
42	Yes	No	No	No	Yes	Yes	No	Yes
43	Yes	Yes	Yes	No	No	Yes	Yes	No
44	No	No	Yes	Yes	No	Yes	No	No
45	No	Yes	Yes	Yes	No	Yes	No	No
46	No	Yes	Yes	No	Yes	No	No	No
47	Yes	Yes	No	Yes	Yes	Yes	No	No
48	Yes	Yes	Yes	Yes	No	Yes	No	No
49	Yes	No	Yes	No	No	No	Yes	No
50	Yes	No	Yes	Yes	No	Yes	No	No
51	Yes	Yes	Yes	No	No	No	No	Yes
52	No	Yes	No	No	No	No	No	No
53	Yes	No	No	No	Yes	Yes	Yes	No
54	Yes	No	No	Yes	Yes	Yes	No	No
55	No	No	No	Yes	No	Yes	Yes	No
56	Yes	Yes	Yes	Yes	No	No	Yes	No
57	No	No	Yes	No	Yes	Yes	No	No
58	No	Yes	No	Yes	Yes	Yes	No	No
59	No	Yes	No	Yes	No	Yes	Yes	No
60	Yes	Yes	Yes	Yes	No	Yes	No	No
61	No	No	No	Yes	Yes	Yes	No	No
62	No	No	No	No	No	No	No	No
63	No	Yes	Yes	Yes	No	No	No	No
64	Yes	No	Yes	No	Yes	Yes	No	No
65	No	No	Yes	Yes	Yes	No	No	No
66	Yes	Yes	No	No	No	No	No	No
67	Yes	Yes	Yes	No	Yes	Yes	No	No
68	No	No	No	No	No	No	No	No
69	Yes	Yes	No	Yes	No	No	No	Yes
70	No	No	Yes	Yes	Yes	No	No	No
71	No	Yes	No	Yes	Yes	No	No	No
72	No	Yes	Yes	No	No	Yes	No	Yes

APPENDIX 11 (continued)

	19b-7	20	20b-1	20b-2	20b-3	20b-4	20b-5	20b-6	20b-7	20b-8
1	No	No	Yes	Yes	No	Yes	No	No	No	Yes
2	No	No	No	Yes	Yes	No	No	No	No	Yes
3	No	No	No	Yes	No	No	No	No	Yes	Yes
4	No	No	No	Yes	Yes	Yes	No	No	No	Yes
5	No	Yes	No	No	No	No	No	No	No	No
6	Yes	No	No	Yes	Yes	No	No	No	Yes	Yes
7	No	No	No	Yes	No	No	No	Yes	No	No
8	No	Yes	No	No	Yes	Yes	No	Yes	No	Yes
9	No	Yes	No	No	No	No	No	No	No	No
10	Yes	No	Yes	No	Yes	Yes	No	Yes	Yes	Yes
11	No	Yes	No	No	No	No	No	No	No	No
12	No	No	No	No	Yes	Yes	Yes	No	Yes	Yes
13	No	Yes	No	No	No	No	No	No	No	No
14	No	No	Yes	Yes	No	No	No	Yes	Yes	Yes
15	No	No	No	Yes	Yes	No	No	No	Yes	Yes
16	No	No	No	Yes	Yes	No	No	No	Yes	No
17	No	No	No	Yes	No	Yes	Yes	No	Yes	Yes
18	No	Yes	No	No	No	No	No	No	No	No
19	No	No	No	Yes	Yes	Yes	Yes	No	No	Yes
20	No	No	No	Yes	No	No	Yes	No	Yes	Yes
21	Yes	Yes	No	No	No	No	No	No	No	No
22	No	Yes	No	No	No	No	No	No	No	No
23	No	No	Yes	Yes	Yes	Yes	No	No	Yes	Yes
24	No	Yes	No	No	No	No	No	No	No	No
25	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	No	Yes
26	No	No	Yes	Yes	No	No	No	No	Yes	No
27	Yes	No	Yes	No	Yes	Yes	No	No	No	Yes
28	No	Yes	No	No	No	No	No	No	No	No
29	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
30	Yes	Yes	No	No	No	No	No	No	No	No
31	No	Yes	No	No	No	No	No	No	No	No
32	No	Yes	No	No	No	No	No	No	No	No
33	Yes	Yes	No	Yes	No	Yes	No	No	No	Yes
34	No	Yes	No	Yes	No	Yes	No	No	No	No
35	No	No	No	No	Yes	No	No	No	No	Yes
36	No	No	No	Yes	Yes	Yes	No	No	Yes	Yes

APPENDIX 11 (continued)

	19b-7	20	20b-1	20b-2	20b-3	20b-4	20b-5	20b-6	20b-7	20b-8
37	No	No	Yes	Yes	Yes	Yes	No	No	No	Yes
38	No	Yes	No	No	No	No	No	No	No	No
39	No	Yes	No	No	No	No	No	No	No	No
40	No	Yes	No	No	No	No	No	No	No	No
41	No	No	No	Yes	Yes	Yes	No	No	Yes	Yes
42	No	No	Yes	Yes	No	No	No	No	No	No
43	No	Yes	No	No	No	No	No	No	Yes	Yes
44	No	No	Yes	Yes	No	Yes	Yes	Yes	No	Yes
45	No	Yes	No	No	No	No	No	No	No	No
46	Yes	No	Yes	Yes	Yes	No	No	No	No	No
47	No	Yes	No	No	No	No	No	No	No	No
48	No	Yes	No	No	No	No	No	No	No	No
49	Yes	Yes	No	No	No	No	No	No	No	Yes
50	No	Yes	No	Yes	Yes	No	No	No	Yes	Yes
51	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
52	No	No	No	Yes	Yes	Yes	No	No	Yes	Yes
53	No	Yes	Yes	No	No	No	No	No	Yes	No
54	No	Yes	No	No	No	No	No	No	No	No
55	No	Yes	No	No	No	No	No	No	No	No
56	No	Yes	No	No	No	No	No	No	No	No
57	No	Yes	No	Yes	No	No	Yes	Yes	Yes	Yes
58	No	Yes	No	No	No	No	No	No	No	No
59	No	Yes	No	No	No	No	No	No	No	No
60	No	Yes	No	Yes	Yes	Yes	No	No	Yes	Yes
61	No	No	No	Yes	Yes	Yes	No	No	No	No
62	No	Yes	No	Yes	Yes	No	No	Yes	Yes	Yes
63	Yes	Yes	No	No	No	No	No	No	No	No
64	No	Yes	No	No	No	No	No	No	No	No
65	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
66	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes
67	No	Yes	No	Yes	No	Yes	No	No	No	Yes
68	Yes	Yes	No	No	No	No	No	No	No	No
69	Yes	Yes	No	No	No	No	No	No	No	No
70	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
71	No	Yes	Yes	Yes	No	Yes	No	Yes	Yes	No
72	No	Yes	No	No	No	No	No	No	No	No

APPENDIX 12. GLOSSARY OF TERMS

Key Learning Areas - there are six Key Learning Areas within the Primary School Curriculum - English, Mathematics, Science and Technology, Human Society and its Environment (including modern languages), Creative and Practical Arts, Personal Development, Health and Physical Education.. The curriculum is defined within a 'framework rather than subject areas to allow decisions about balance, breadth and coherence to be made without sacrificing flexibility'. (p.36 Shaping the future)

Tournament of Minds - is a creative problem solving competition for children in years five to nine held annually in each region of New South Wales. The competition is open to all schools systems and is run at a regional, state and then national level. This competition was introduced to Metropolitan South West Region in 1992. Initially fifty schools registered their teams and thirty seven schools participated on Tournament Day.

Minds in Motion - is an after school enrichment activity for children in Department of School Education Schools within the region. The pilot program was coordinated between the University of Western Sydney, Macarthur and the region where the students enrolled in the Diploma of Teaching (Primary) coordinated the activities for the children attending. The pilot program was expanded during 1992 to include other centres within the region and also utilised teachers from the region as facilitators of the activities.

This is an indication that training institutions will now need to cater for the training of teachers at an undergraduate level in the area of gifted and talented education and that a recognised level of basic training be established In January 1993 a preliminary statement by the NSW Ministerial Advisory Council on Teacher Education and the Quality of Teaching areas of competence for beginning teachers, identified six areas within the frameworks. They are:

the ethics of Teaching;
the content of Teaching;
the practice of Teaching;
management in classroom/schools/centres;
interaction with parents and the school community; and
professionalism and professional development

Within the content of teaching

> All beginning teachers need to
> Recognise, and in conjunction with appropriate support services, meet the individual needs of all students, including:
> Girls;
> Gifted and Talented students;
> Aboriginal Students;
> Students with disabilities, learning difficulties or behaviour disorders;
> students from low socioeconomic backgrounds;
> students from non English speaking backgrounds; and
> students living in isolated areas.
> (Communication from the Ministry of Education and Youth Affairs January 1993)

for the position of Co-ordinator and/or a teacher of gifted and talented children. Further, the Region, Educational Resource Centres, Clusters and schools should develop five year plans for the development of gifted and talented teaching but be aware of the pitfalls of trying to attempt too much too quickly.